

Project Number
19.01181



HUBBELL
Lighting

Date
6/25/2019

Photometric Test Report

Lab 1
Sphere

Test Sample Description

Catalog Number: P300290-009-30

Description: 2-LT LED Vanity w/ 2-Etched - White Inside Refractors

Photometry

IES LM-46-04
Test Method: IES LM-79-08 §10

Preburn Time: 0:10

Time To Stabilize: 0:48

Total Operating Time: 1:58

Input Voltage (Volts): 120.2

Input Current (Amps): 0.169

Input Wattage (Watts): 20.2

Ambient Temp (°C): 26

Sphere

IES LM-16-93
Test Method: IES LM-79-08 §12.1

Preburn Time: 0:10

Time To Stabilize: 1:41

Total Operating Time: 2:45

Input Voltage (Volts): 120.1

Input Current (Amps): 0.166

Input Wattage (Watts): 19.8

Ambient Temp (°C): 24

PF @ 120V: 0.999

THD @ 120V (%): 13.7



Hubbell Lighting, Inc.

701 Millennium Boulevard
Greenville, SC 29607
www.hubbellighting.com

Checked (sphere): M. ELLMANN
Checked (photometry): D. ROBBINS
Approved: P. McCARTHY



This report shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.



HUBBELL Lighting

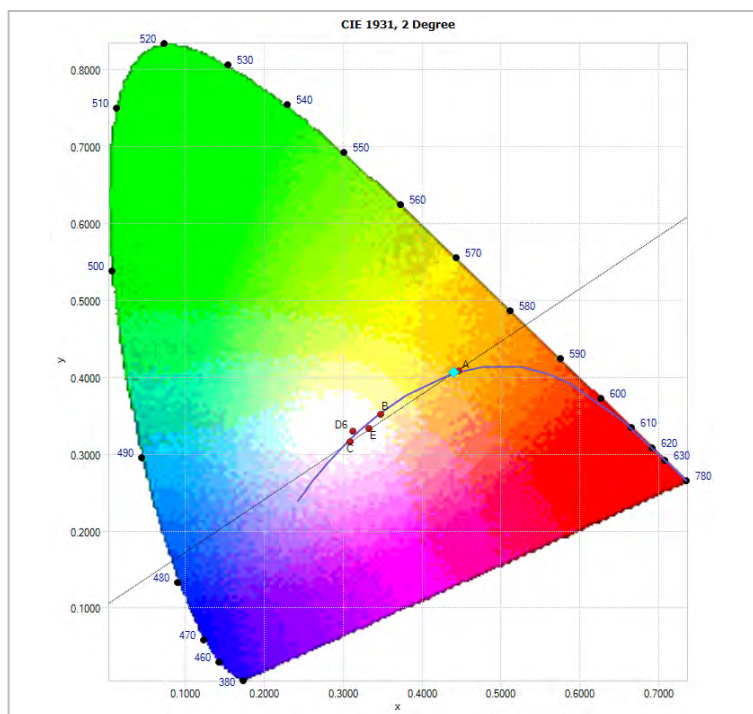
Lamp Cat#: 2835

Lamp Desc: 30 - Bridgelux 3000K LEDs

Efficacy: 53.4 LPW

S/P Ratio: 1.4 LM/LM

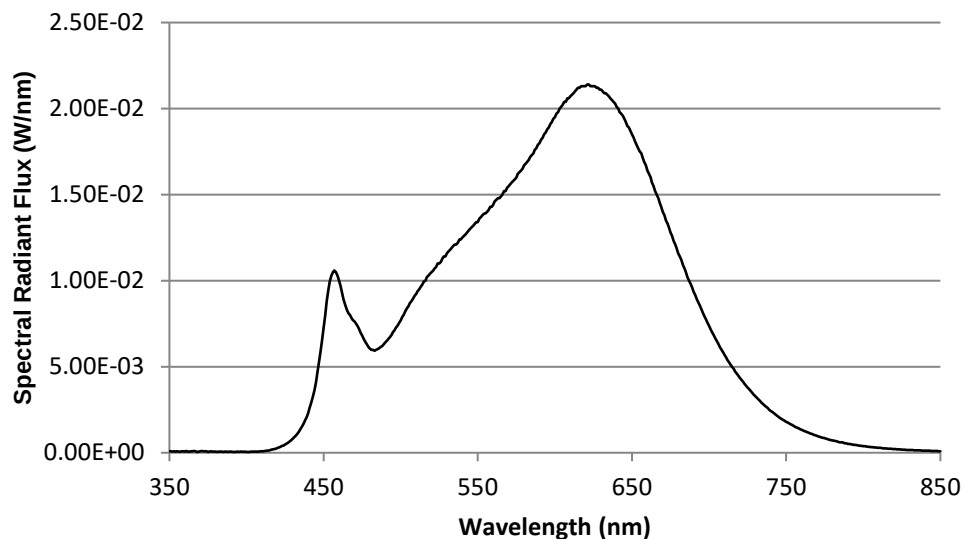
Chromaticity Diagram



Spectral Results

Name	Value	Unit
Φ	3.73	watts
$\Phi(v)$	1057	lumens
$\Phi(v')$	1509	lm'
Chrom x	0.4402	
Chrom y	0.4066	
Chrom u	0.2516	
Chrom v	0.3486	
Duv	0.0004	
Chrom u'	0.2516	
Chrom v'	0.5229	
CCT	2964	K
Purity	54.2	%
λ (dom)	582.8	nm
FWHM	162.7	nm
λ (peak)	621.5	nm
λ (center)	602.8	nm
λ (centroid)	596.6	nm
SDCM	Cool White	
RA	94	
Corr. Coef.	0.000607549	
Correlation	0.0054	
R1	94.5	
R2	98.3	
R3	98.9	
R4	92.5	
R5	93.7	
R6	97.1	
R7	91.8	
R8	83.6	
R9	65.0	
R10	94.5	
R11	93.5	
R12	80.2	
R13	95.8	
R14	99.5	

Spectral Distribution of Radiant Flux





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CATALOG NUMBER: P300290-009-30

LUMINAIRE: 2-LT LED Vanity w/ 2-Etched - White Inside Refractors

LAMP CAT. NO.: 2835

LAMP: 30- Bridgelux 3000K LEDs

MOUNTING: wall

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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CANDELA DISTRIBUTION

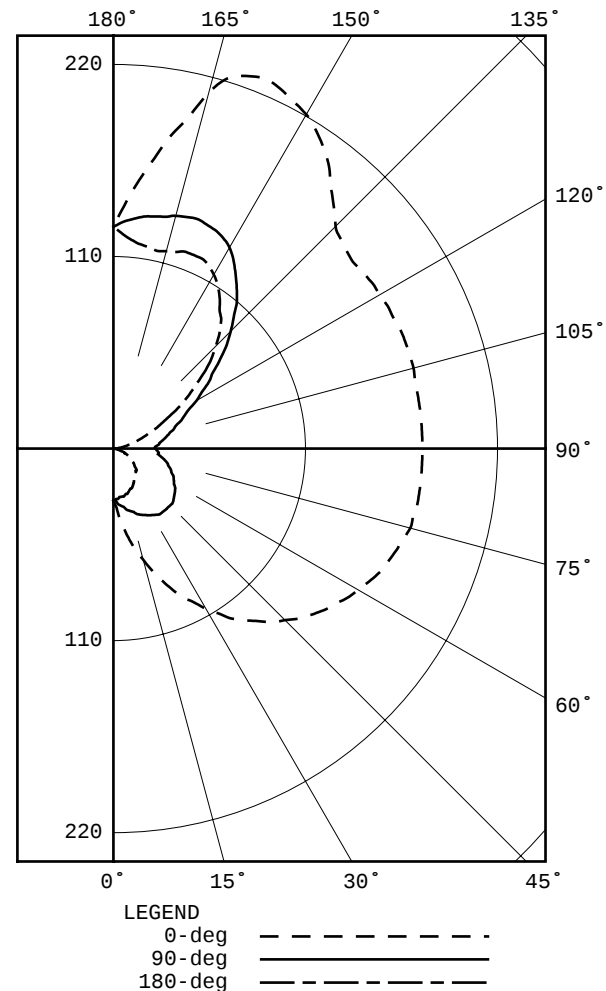
	0.0	45.0	90.0	135.0	180.0
0	30	30	30	30	30
5	40	37	32	29	29
15	66	55	37	29	27
25	94	74	42	28	25
35	119	91	46	25	22
45	139	105	46	20	18
55	155	116	43	15	14
65	168	123	38	10	9
75	176	128	32	5	4
85	177	127	26	1	0
90	177	127	24	0	0
95	177	127	26	3	3
105	178	128	33	12	11
115	177	129	45	27	26
125	175	131	67	50	52
135	180	145	95	76	83
145	210	174	122	100	106
155	227	194	138	112	120
165	211	183	138	116	117
175	152	145	132	122	120
180	127	127	127	127	127

FLUX

3
12
24
36
48
58
65
68
68
69
72
76
82
87
87
71
43
13

ZONAL ZONE	LUMEN	SUMMARY LUMENS	%FIXT
0- 30		39	4.0
0- 40		75	7.6
0- 60		182	18.5
0- 90		383	39.0
90-120		218	22.2
90-130		300	30.5
90-150		473	48.2
90-180		600	61.0
0-180		983	100.0

EFFICACY = 48.7 lm/W
CIE TYPE - SEMI-INDIRECT
PLANE : 0-DEG 90-DEG 180-DEG
SPACING CRITERIA : 3.99 2.11 1.15
SHIELDING ANGLES : 90 90





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PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 2.250 14.000
HEIGHT OF SIDE : 5.000 5.000

LUMINANCE DATA IN CANDELA/SQ M
ANGLE AVERAGE AVERAGE AVERAGE
IN DEG 0-DEG 90-DEG 180-DEG
45 3002. 2359. 389.
55 3186. 2443. 288.
65 3393. 2505. 182.
75 3600. 2608. 82.
85 3785. 2888. 0.



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CANDELA DISTRIBUTION
LATERAL ANGLE

	0.0	5.0	10.0	15.0	20.0	22.5	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0
0.0	30	30	30	30	30	30	30	30	30	30	30	30	30	30
2.5	33	33	33	33	33	33	33	32	32	32	32	32	31	31
5.0	40	40	40	39	39	39	39	38	38	37	37	36	35	35
7.5	46	46	46	45	45	45	44	43	43	42	41	40	39	38
10.0	53	53	52	52	51	50	50	49	48	47	45	44	43	42
12.5	60	59	59	58	58	57	56	55	54	52	50	49	47	45
15.0	66	65	65	64	63	63	62	60	59	57	55	53	51	49
17.5	73	73	72	71	70	69	68	66	64	62	59	57	55	52
20.0	80	80	79	78	77	76	75	72	70	67	65	62	59	56
22.5	87	86	85	84	83	82	80	78	75	72	69	66	63	59
25.0	94	93	92	91	89	88	86	84	81	77	74	70	66	63
27.5	99	100	99	97	95	93	92	89	86	82	78	74	70	66
30.0	106	106	105	103	101	99	98	95	91	87	83	78	74	69
32.5	112	112	111	109	107	105	103	100	96	91	87	82	77	72
35.0	119	118	117	115	113	111	109	105	101	96	91	86	81	75
37.5	124	124	123	120	117	116	114	110	105	100	95	90	84	78
40.0	129	129	128	125	122	121	119	114	109	104	98	93	87	81
42.5	135	135	133	131	128	125	123	119	114	108	102	96	90	83
45.0	139	139	137	135	132	130	128	123	117	112	105	99	92	86
47.5	144	143	141	139	136	133	131	126	121	115	108	102	95	88
50.0	148	147	146	143	139	137	135	130	124	118	111	104	97	90
52.5	152	151	149	147	143	141	138	133	127	120	113	106	99	92
55.0	155	155	153	150	146	144	141	136	130	123	116	108	101	93
57.5	159	158	156	154	150	147	145	139	132	125	118	110	102	94
60.0	162	161	159	156	152	150	147	141	134	127	119	112	104	95
62.5	165	165	162	160	155	153	150	144	137	130	122	114	105	97
65.0	168	167	165	162	157	155	152	146	139	131	123	115	106	98
67.5	170	169	167	164	159	157	154	147	140	133	124	116	107	98
70.0	172	172	169	166	162	159	156	150	142	134	126	118	109	99
72.5	174	174	171	168	162	160	157	150	143	135	126	118	108	99
75.0	176	175	173	169	164	161	159	152	144	136	128	119	109	100
77.5	176	176	173	170	164	161	159	152	144	136	127	118	109	99
80.0	177	176	174	170	165	162	159	152	145	136	127	118	109	99
82.5	177	177	175	170	165	162	159	152	144	136	127	118	108	98
85.0	177	176	174	171	166	163	159	152	145	136	127	118	108	98
87.5	177	177	174	170	165	162	159	153	145	136	127	118	108	98
90.0	177	176	174	170	166	162	159	152	145	136	127	118	108	98
92.5	177	177	174	171	165	162	159	152	145	136	127	118	108	99
95.0	177	177	175	171	165	163	159	153	145	137	127	118	109	99
97.5	177	177	175	171	165	162	159	152	145	136	127	118	109	99
100.0	177	177	175	171	166	163	160	153	145	137	128	119	109	100
102.5	177	177	175	171	166	163	160	153	145	137	128	119	109	100
105.0	178	177	175	172	166	163	159	153	145	137	128	119	109	100
107.5	178	177	175	171	166	163	160	153	145	137	128	119	110	100
110.0	178	177	175	171	166	163	160	153	145	137	128	119	110	101
112.5	178	177	175	171	166	163	160	153	145	137	128	119	111	102
115.0	177	177	175	171	165	163	160	153	145	137	129	120	111	102
117.5	177	176	174	170	165	162	159	152	145	137	129	120	112	103
120.0	176	176	174	169	165	162	159	152	145	137	129	121	113	105
122.5	176	175	173	169	164	161	159	152	145	138	130	122	114	107
125.0	175	175	171	169	164	161	158	152	146	139	131	124	116	109
127.5	174	174	172	168	164	161	159	153	147	140	133	126	119	112
130.0	175	175	173	170	165	163	161	155	149	143	137	130	123	117
132.5	177	176	175	172	168	166	164	158	153	147	140	134	128	121
135.0	180	180	178	176	172	170	167	162	157	151	145	139	133	127
137.5	187	186	184	182	179	176	175	170	164	158	152	146	139	133
140.0	194	194	192	190	187	185	183	178	172	167	160	153	147	141
142.5	203	203	201	198	195	193	191	186	180	175	167	160	153	148
145.0	210	209	208	205	202	200	197	192	187	181	174	168	161	154
147.5	216	216	214	212	208	206	204	199	193	188	181	175	168	161

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CANDELA DISTRIBUTION LATERAL ANGLE														
	0.0	5.0	10.0	15.0	20.0	22.5	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0
150.0	221	221	219	217	213	212	209	204	198	192	186	180	173	168
152.5	224	224	222	220	217	215	212	208	202	196	190	184	178	171
155.0	227	226	225	222	219	217	215	210	205	200	194	188	182	175
157.5	229	228	226	224	220	219	216	212	207	202	196	190	184	177
160.0	227	227	226	223	220	218	216	211	206	201	196	190	183	177
162.5	223	222	221	219	216	213	212	207	203	198	192	186	180	173
165.0	211	210	210	206	204	201	201	196	193	188	183	178	173	166
167.5	193	194	192	191	189	187	186	183	180	176	173	169	164	159
170.0	180	179	178	177	176	174	174	171	170	166	163	159	157	153
172.5	165	165	165	163	162	161	161	159	158	156	154	152	149	147
175.0	152	152	152	150	151	150	149	148	147	146	145	144	142	141
177.5	139	139	139	138	138	138	138	137	137	136	136	135	135	134
180.0	127	127	127	127	127	127	127	127	127	127	127	127	127	127



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CANDELA DISTRIBUTION
LATERAL ANGLE

	65.0	67.5	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0	110.0	112.5	115.0	120.0
0.0	30	30	30	30	30	30	30	30	30	30	30	30	30	30
2.5	31	31	31	31	31	30	30	30	30	30	30	30	30	29
5.0	34	34	34	33	32	32	32	31	31	31	30	30	30	30
7.5	37	36	36	35	34	33	33	32	31	31	30	30	30	29
10.0	40	40	39	37	36	35	34	33	32	31	31	31	30	30
12.5	44	43	42	40	39	37	36	34	33	32	31	31	31	30
15.0	47	46	44	43	41	39	37	35	34	33	32	31	31	30
17.5	50	48	47	45	42	40	38	36	35	33	32	32	31	30
20.0	53	52	50	47	45	42	40	38	36	34	33	32	32	31
22.5	56	54	53	50	47	44	41	39	36	35	33	32	32	31
25.0	59	57	55	52	49	45	42	40	37	35	33	32	32	31
27.5	62	60	58	54	50	47	43	40	37	35	33	32	31	30
30.0	65	62	60	56	52	48	44	41	38	35	33	32	31	29
32.5	67	65	62	58	53	49	45	41	38	35	32	31	30	29
35.0	70	68	65	60	55	50	46	42	38	35	32	31	30	29
37.5	73	70	67	61	56	51	46	42	38	34	31	30	29	27
40.0	74	71	69	63	57	51	46	41	37	33	30	29	28	26
42.5	77	74	71	64	58	52	46	41	36	33	30	28	27	25
45.0	79	76	72	66	59	52	46	41	36	32	29	28	26	24
47.5	81	77	73	66	59	52	46	40	35	31	28	26	25	23
50.0	82	79	75	67	60	52	45	39	34	30	27	26	24	22
52.5	84	80	76	68	59	52	44	38	33	29	26	24	23	21
55.0	85	81	77	68	59	51	43	37	32	28	25	23	22	20
57.5	86	82	78	69	59	50	42	36	31	27	23	22	21	19
60.0	87	82	78	68	58	49	40	34	29	25	22	20	19	17
62.5	88	84	79	69	59	49	39	33	28	24	21	19	18	16
65.0	89	84	79	69	58	47	38	31	27	23	19	18	17	15
67.5	89	84	79	68	57	46	36	29	25	21	18	17	15	13
70.0	90	85	80	69	57	45	35	28	24	20	17	16	14	12
72.5	89	84	79	68	56	44	33	26	22	18	15	14	12	10
75.0	90	85	79	68	56	43	32	25	21	17	14	13	12	10
77.5	89	84	79	67	54	41	30	23	19	15	12	11	10	8
80.0	89	84	78	66	53	40	28	22	18	14	11	10	9	7
82.5	88	83	77	65	52	38	26	20	16	13	10	8	7	5
85.0	88	83	77	65	52	38	26	19	15	12	9	8	6	5
87.5	88	82	77	64	51	37	25	18	14	11	8	7	6	4
90.0	88	83	77	64	50	36	24	17	14	10	8	7	6	4
92.5	88	83	77	64	51	37	24	18	15	11	9	8	7	5
95.0	89	84	78	65	52	38	26	20	16	13	11	10	9	7
97.5	89	84	78	66	53	39	27	21	18	15	12	11	10	8
100.0	90	85	79	67	54	41	29	24	20	17	15	14	13	11
102.5	90	85	80	68	55	42	31	25	22	19	17	16	15	13
105.0	91	85	80	68	56	44	33	27	24	22	20	18	17	16
107.5	91	86	81	70	58	46	36	30	27	25	23	22	21	19
110.0	92	87	82	71	60	48	38	34	31	28	26	25	24	23
112.5	93	88	83	72	62	51	42	37	34	32	30	29	28	27
115.0	94	89	84	74	64	54	45	41	38	36	34	33	33	31
117.5	95	90	86	76	67	57	49	45	43	41	39	38	38	36
120.0	97	93	88	79	70	62	55	51	48	46	45	44	43	41
122.5	99	95	91	83	74	66	60	56	54	52	51	50	49	47
125.0	102	98	95	87	79	72	67	63	60	58	57	56	56	53
127.5	106	102	98	91	84	78	72	69	66	65	64	63	62	60
130.0	110	107	104	97	91	85	80	77	74	72	71	70	70	67
132.5	115	112	109	103	97	92	88	84	81	79	78	77	77	74
135.0	121	118	115	109	103	98	95	90	88	86	84	83	82	81
137.5	127	124	121	116	111	106	102	98	95	92	91	90	89	87
140.0	134	132	129	123	118	114	110	105	102	99	97	96	95	93
142.5	141	138	136	130	125	120	116	112	108	105	102	101	100	98
145.0	148	146	143	137	132	127	122	118	114	110	107	106	105	103
147.5	155	152	149	143	138	133	128	123	119	115	111	110	109	106

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www.hubbelllighting.com**REPORT NUMBER:** 19.01181**PAGE:** 9 OF 14**ISSUE DATE:** 06/27/19**PREPARED FOR:** PROGRESS**CATALOG NUMBER:** P300290-009-30**CANDELA DISTRIBUTION**
LATERAL ANGLE

	65.0	67.5	70.0	75.0	80.0	85.0	90.0	95.0	100.0	105.0	110.0	112.5	115.0	120.0
150.0	161	157	155	149	143	138	133	127	123	119	115	113	112	110
152.5	165	162	159	153	147	142	136	130	125	121	117	115	114	112
155.0	168	165	162	155	150	144	138	132	127	123	119	117	116	113
157.5	170	168	164	157	151	145	139	134	128	124	120	119	117	116
160.0	170	167	163	157	151	145	140	134	129	125	121	120	119	117
162.5	167	164	160	154	148	144	139	134	129	125	122	121	120	118
165.0	161	158	156	151	146	142	138	133	129	126	123	122	121	119
167.5	155	153	151	147	143	139	136	132	129	126	123	122	121	120
170.0	150	148	146	143	140	137	135	132	129	126	124	123	122	121
172.5	145	143	142	140	138	136	134	131	129	127	125	124	123	122
175.0	139	138	137	136	134	134	132	130	129	127	125	125	124	123
177.5	133	133	132	132	131	131	130	129	128	127	126	125	125	124
180.0	127	127	127	127	127	127	127	127	127	127	127	127	127	127



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CANDELA DISTRIBUTION
LATERAL ANGLE

	125.0	130.0	135.0	140.0	145.0	150.0	155.0	157.5	160.0	165.0	170.0	175.0	180.0
0.0	30	30	30	30	30	30	30	30	30	30	30	30	30
2.5	29	29	29	29	29	29	29	29	29	29	29	29	29
5.0	29	29	29	29	29	29	29	29	29	29	29	29	29
7.5	29	29	28	28	28	28	28	28	28	28	28	28	28
10.0	29	29	29	29	28	28	28	28	28	28	28	28	28
12.5	30	29	29	29	28	28	28	28	28	28	28	28	28
15.0	30	29	29	29	28	28	28	28	27	27	27	27	27
17.5	30	29	29	29	28	28	28	27	27	27	27	27	27
20.0	30	30	29	29	29	28	28	28	27	27	27	27	26
22.5	30	29	29	28	28	28	27	27	27	26	26	26	25
25.0	30	29	28	28	28	27	27	27	27	26	25	25	25
27.5	29	28	27	27	27	26	26	26	26	25	24	24	24
30.0	28	27	26	26	26	26	25	25	25	24	24	24	23
32.5	27	26	25	25	25	24	24	24	23	23	23	22	22
35.0	27	26	25	24	24	23	23	23	23	23	22	22	22
37.5	26	24	23	22	22	22	21	21	21	21	21	21	21
40.0	24	23	22	21	20	20	20	20	20	20	20	20	20
42.5	23	22	21	20	20	19	19	19	19	19	19	19	19
45.0	23	21	20	19	19	18	18	18	18	19	18	18	18
47.5	22	20	19	18	17	17	17	17	17	17	18	17	18
50.0	20	19	17	17	16	16	17	17	17	17	17	17	16
52.5	19	17	16	15	15	15	15	16	16	16	16	15	15
55.0	18	16	15	14	14	14	14	14	14	14	14	14	14
57.5	17	15	14	13	13	13	13	13	13	13	13	13	13
60.0	15	13	12	11	11	11	11	11	11	11	11	11	11
62.5	14	13	11	11	10	10	10	10	10	10	10	10	10
65.0	13	11	10	9	9	9	9	9	9	9	9	9	9
67.5	11	10	8	8	7	8	7	7	7	8	7	7	7
70.0	10	9	8	7	7	7	7	7	7	7	7	7	7
72.5	9	7	6	5	5	5	5	5	5	5	5	5	5
75.0	8	7	5	5	5	4	4	5	4	4	4	4	4
77.5	6	5	4	3	3	3	3	2	3	3	3	3	3
80.0	5	4	3	2	2	2	2	2	2	2	2	2	2
82.5	4	2	1	1	1	1	1	1	0	0	1	1	0
85.0	3	2	1	1	0	0	0	0	0	0	0	0	0
87.5	3	1	1	0	0	0	0	0	0	0	0	0	0
90.0	2	1	0	0	0	0	0	0	0	0	0	0	0
92.5	3	2	1	1	1	1	1	1	1	1	1	1	1
95.0	5	4	3	3	2	2	2	2	2	2	2	2	3
97.5	7	6	5	4	4	4	4	4	4	4	4	4	4
100.0	9	8	7	6	6	6	6	6	6	6	6	6	6
102.5	12	10	10	9	8	8	8	8	8	8	8	8	8
105.0	14	13	12	11	11	11	11	11	11	11	11	11	11
107.5	18	16	15	15	14	14	14	14	14	14	14	14	14
110.0	21	20	19	18	17	17	17	17	17	17	17	17	17
112.5	25	24	23	22	21	21	21	21	21	21	21	21	21
115.0	30	28	27	26	25	25	25	26	26	26	26	26	26
117.5	35	33	32	31	30	30	31	31	31	31	31	31	31
120.0	40	39	37	36	36	36	36	37	37	37	37	38	37
122.5	46	44	43	42	42	43	43	44	44	45	45	45	45
125.0	52	51	50	49	49	50	51	51	51	52	52	52	52
127.5	58	57	56	56	56	57	58	58	58	59	59	60	59
130.0	66	64	63	63	64	65	66	66	67	68	68	68	68
132.5	73	71	70	70	71	72	73	74	74	75	75	76	76
135.0	79	77	76	76	77	78	79	80	80	82	82	83	83
137.5	85	84	83	83	84	85	86	87	87	89	89	90	90
140.0	91	89	90	90	91	91	93	93	93	94	95	95	96
142.5	96	95	95	95	97	98	99	99	99	100	100	101	100
145.0	101	99	100	101	102	104	104	105	105	106	106	106	106
147.5	105	104	104	105	107	108	109	110	110	110	111	111	111

THIS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.



HUBBELL
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701 Millennium Blvd
Greenville, SC 29607
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CANDELA DISTRIBUTION
LATERAL ANGLE

	125.0	130.0	135.0	140.0	145.0	150.0	155.0	157.5	160.0	165.0	170.0	175.0	180.0
150.0	108	108	108	109	111	112	113	114	114	115	115	115	115
152.5	111	110	110	111	113	114	116	116	116	117	117	118	118
155.0	113	112	112	113	114	116	117	118	118	118	119	119	120
157.5	114	114	114	114	115	117	118	118	119	119	120	120	120
160.0	116	115	115	116	116	117	118	118	118	119	120	120	120
162.5	117	116	116	116	116	116	117	117	117	118	118	118	118
165.0	118	117	116	116	116	116	116	116	116	116	117	117	117
167.5	118	117	117	116	116	116	116	116	116	116	116	116	116
170.0	120	119	118	118	117	117	117	117	117	117	117	117	117
172.5	121	121	120	120	120	119	119	119	119	119	119	119	118
175.0	123	122	122	122	121	121	121	121	121	121	120	121	120
177.5	124	124	124	124	124	123	123	124	123	123	123	123	123
180.0	127	127	127	127	127	127	127	127	127	127	127	127	127



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5-DEGREE		
ZONAL	LUMEN	SUMMARY
0- 5		1
5- 10		3
10- 15		5
15- 20		7
20- 25		10
25- 30		13
30- 35		17
35- 40		20
40- 45		23
45- 50		26
50- 55		28
55- 60		30
60- 65		32
65- 70		33
70- 75		34
75- 80		34
80- 85		34
85- 90		34
90- 95		34
95-100		35
100-105		36
105-110		37
110-115		38
115-120		39
120-125		40
125-130		42
130-135		43
135-140		44
140-145		44
145-150		42
150-155		38
155-160		33
160-165		25
165-170		17
170-175		10
175-180		3

10-DEGREE		
ZONAL	LUMEN	SUMMARY
0- 10		3
0- 20		15
0- 30		39
0- 40		75
0- 50		124
0- 60		182
0- 70		247
0- 80		315
0- 90		383
0-100		452
0-110		525
0-120		601
0-130		683
0-140		770
0-150		857
0-160		928
0-170		970
0-180		983



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	92	86	81	76	83	78	73	69	62	59	56	48	46	44	35	33	32	26
2	82	73	66	59	74	66	60	54	53	48	44	40	37	34	29	26	24	19
3	74	63	55	48	66	57	50	44	45	40	35	34	30	27	24	22	19	14
4	67	55	46	39	60	50	42	36	39	34	29	30	26	22	21	18	15	11
5	61	48	40	33	55	44	36	30	35	29	24	26	22	18	19	15	13	9
6	56	43	34	28	50	39	31	25	31	25	20	24	19	16	17	13	11	8
7	52	39	30	24	46	35	27	22	28	22	18	21	17	13	15	12	9	6
8	48	35	26	21	43	31	24	19	25	19	15	19	15	12	14	10	8	5
9	44	31	24	18	40	28	21	17	23	17	13	18	13	10	13	9	7	5
10	41	29	21	16	37	26	19	15	21	16	12	16	12	9	12	8	6	4

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

Project Number
19.01181



HUBBELL
Lighting

Date
6/25/2019

Goniophotometer Calibration

Calibration Lamp: GE 1000W, 120V, T6, CL (FEL)

Lamp Number: ITL78966-1000-38

Calibration Current: 8.300 Amps DC

Total Luminous Flux: 25889.0 Lumens

Calibration Date: 07/10/17

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
Goniophotometer	ITL/HLI LAB 1 - Test Distance: 31.74'	N/A	N/A
Power Analyzer	Yokogawa / WT 332	C2QA27071V	10/31/2019
Power Source	Voltage-Regulated House Power	N/A	N/A
Thermometer	National Instruments / USB-TC01	176F4E3	10/31/2019

Sphere Calibration

Calibration Lamp: EIKO 28V75W/E10

Lamp Number: SCL-1400-K136

Calibration Current: 2.679 Amps

Total Luminous Flux: 1429 Lumens

Test Equipment Used - Color & SPD; THD & Power Factor

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
3-Meter Sphere	Labsphere / LMS-3M	N/A	Calibration Checked Daily
Thermometer	National Instruments / USB TC01	1912751	10/31/2019
Power Analyzer	Yokogawa / WT332	C2QA27075V	10/31/2019
Power Supply	Chroma / 61602	616020002113	N/A
Power Supply PF/THD	Voltage-Regulated House Power	N/A	N/A
Aux Lamp Supply	GW Instek / PSU 150-10	GER221028	N/A
Cal Lamp Supply	Labsphere / LPS-150-0268	1218148505	N/A
Spectrometer	Labsphere / CDS 1100	0624117792	N/A

Hubbell Lighting, Inc.

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This report shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.