

Project Number
15.00601



HUBBELL
Lighting

Date
4/17/2015

LAB 1

Test Sample Description

Catalog Number: P3432-2030K9
Description: TRANSIT 18" C-T-C LED SUFRACE MOUNT

Test Method: IES LM-79-08 § 10
Preburn Time: 00:10
Time To Stabilize: 1:23
Total Operating Time: 2:07

Input Voltage (Volts): 120.1
Input Current (Amps): 0.456
Input Wattage (Watts): 50.8
Ambient Temp (°C): 25.1



Hubbell Lighting, Inc.

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www.hubbellighting.com

Checked: D. ROBBINS
Approved: M. WASHBURN

NVLAP[®]
NVLAP LAB CODE: 201003-0

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



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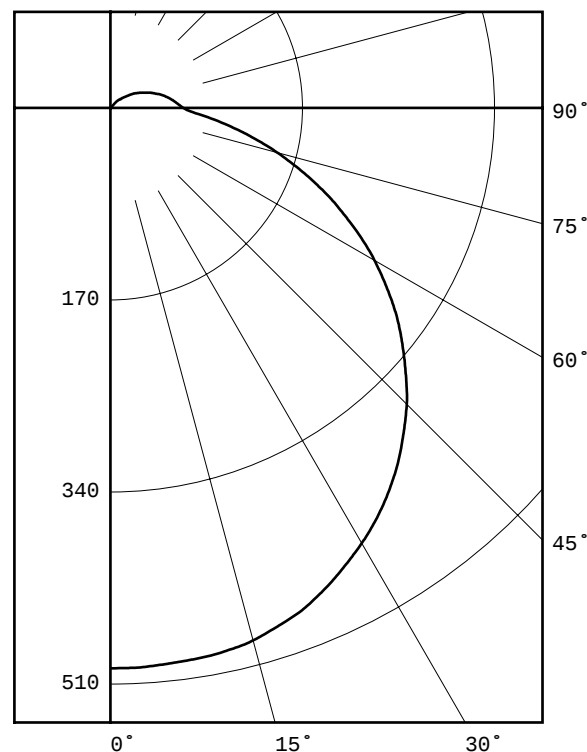
REPORT NUMBER: 15.00601
ISSUE DATE: 04/17/15
PREPARED FOR: PROGRESS
CATALOG NUMBER: P3432-2030K9
LUMINAIRE: TRANSIT 18" C-T-C LED SUFRACE MOUNT
LAMP CAT. NO.: 93047261-4130
LAMP: 120 - NICHIA 3000KLEDs
BALLAST: 3 - 17W , HAL Modules
MOUNTING: Ceiling
NOTE: DATA SHOWN IS ABSOLUTE FOR THE
SAMPLE PROVIDED.
REFRACTOR: White Acrylic Part #93055674

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DEG	CANDELA	LUMENS
0	496	
5	495	47
15	488	138
25	463	214
35	424	265
45	371	286
55	306	273
65	231	229
75	153	162
85	84	94
90	64	
95	58	63
105	46	48
115	32	32
125	19	17
135	9	5
145	0	0
155	0	0
165	0	0
175	0	0
180	0	

ZONAL LUMEN ZONE	SUMMARY LUMENS	%FIXT
0- 30	399	21.3
0- 40	664	35.4
0- 60	1223	65.3
0- 90	1708	91.1
90-120	144	7.7
90-130	161	8.6
90-150	166	8.9
90-180	166	8.9
0-180	1874	100.0

TOTAL INPUT WATTS = 50.8
EFFICACY = 36.9 Lm/W
CIE TYPE - DIRECT
LUMINAIRE SPACING CRITERION = 1.3





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PLANE	:	0-DEG	90-DEG
LUMINOUS LENGTH	:	15.250	15.250
HEIGHT OF SIDE	:	3.500	3.500

LUMINANCE DATA IN CANDELA/SQ METER

ANGLE AVERAGE

IN DEG

45	2843.
55	2677.
65	2440.
75	2121.
85	1772.



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CANDELA DISTRIBUTION

	0.0
0.0	496
5.0	495
10.0	493
15.0	488
20.0	478
25.0	463
30.0	445
35.0	424
40.0	399
45.0	371
50.0	339
55.0	306
60.0	270
65.0	231
70.0	192
75.0	153
80.0	116
85.0	84
90.0	64
95.0	58
100.0	52
105.0	46
110.0	39
115.0	32
120.0	26
125.0	19
130.0	13
135.0	9
140.0	0
145.0	0
150.0	0
155.0	0
160.0	0
165.0	0
170.0	0
175.0	0
180.0	0



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ZONAL LUMEN SUMMARY

0- 5	12.
5- 10	35.
10- 15	58.
15- 20	80.
20- 25	99.
25- 30	115.
30- 35	128.
35- 40	137.
40- 45	143.
45- 50	143.
50- 55	140.
55- 60	133.
60- 65	122.
65- 70	107.
70- 75	90.
75- 80	72.
80- 85	54.
85- 90	40.
90- 95	33.
95-100	30.
100-105	26.
105-110	22.
110-115	18.
115-120	14.
120-125	11.
125-130	7.
130-135	4.
135-140	1.
140-145	0.
145-150	0.
150-155	0.
155-160	0.
160-165	0.
165-170	0.
170-175	0.
175-180	0.



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**5-DEGREE
ZONAL LUMEN SUMMARY**

0- 5	12
5- 10	35
10- 15	58
15- 20	80
20- 25	99
25- 30	115
30- 35	128
35- 40	137
40- 45	143
45- 50	143
50- 55	140
55- 60	133
60- 65	122
65- 70	107
70- 75	90
75- 80	72
80- 85	54
85- 90	40
90- 95	33
95-100	30
100-105	26
105-110	22
110-115	18
115-120	14
120-125	11
125-130	7
130-135	4
135-140	1
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

**10-DEGREE
ZONAL LUMEN SUMMARY**

0- 10	47
0- 20	185
0- 30	399
0- 40	664
0- 50	950
0- 60	1223
0- 70	1452
0- 80	1614
0- 90	1708
0-100	1771
0-110	1819
0-120	1851
0-130	1869
0-140	1874
0-150	1874
0-160	1874
0-170	1874
0-180	1874



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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	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91
1	105	99	94	90	101	96	92	88	90	87	83	85	82	79	80	77	75	72
2	95	86	78	72	91	83	76	70	78	72	67	73	68	64	69	65	62	59
3	86	75	66	59	82	72	64	58	68	61	56	64	58	53	60	55	51	49
4	78	66	56	49	75	64	55	48	60	53	47	57	50	45	53	48	44	41
5	72	58	49	42	69	57	48	41	53	46	40	51	44	39	48	42	38	35
6	66	52	43	36	64	51	42	36	48	40	35	46	39	34	43	37	33	30
7	61	47	38	32	59	46	37	31	44	36	31	41	35	30	39	33	29	27
8	57	43	34	28	55	42	34	28	40	32	27	38	31	26	36	30	26	24
9	53	39	31	25	51	38	30	25	37	29	24	35	28	24	33	27	23	21
10	50	36	28	23	48	35	28	23	34	27	22	32	26	22	31	25	21	19

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 LUMINAIRE SAMPLE.

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Date
4/17/2015

Goniophotometer Calibration

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

Lamp Number: ITL78966-1000-38

Calibration Current: 8.300 Amps DC

Total Luminous Flux: 25753.0 Lumens

Calibration Date: 12/02/2014

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: 31.75'	N/A	
Power Analyzer	Yokogawa / WT 332	C2QA27071V	11/12/2015
Power Source	Voltage-Regulated House Power	N/A	N/A
Thermometer	National Instruments / USB-TC01	176F4E3	11/11/2015

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