

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P291048

Luminaire Tested: **14GR-LD5-20-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291048
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-20-A-UNV-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1771.0 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

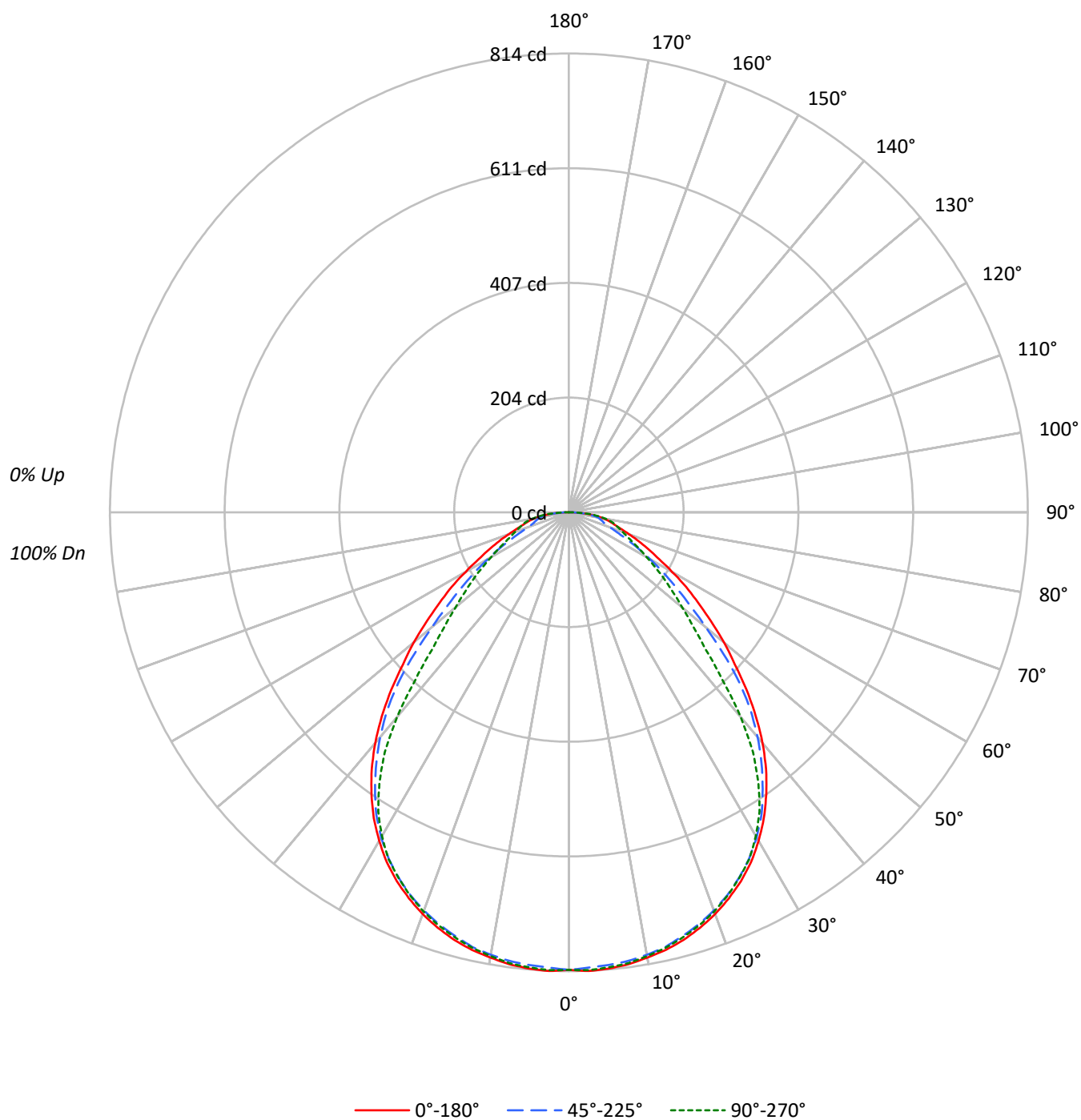
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	98	107	103	100	97		99	96	94		95	93	91		92	90	88
2	101	94	88	83	99	92	86	82		88	84	80		85	81	78		82	79	76
3	93	84	76	71	91	82	75	70		79	74	69		77	72	68		74	70	66
4	86	75	67	61	84	74	67	61		72	65	60		69	64	59		67	62	58
5	80	68	60	54	78	67	59	53		65	58	53		63	57	52		61	56	52
6	74	62	54	48	72	61	53	47		59	52	47		58	51	47		56	51	46
7	69	57	48	43	67	56	48	43		54	47	42		53	47	42		52	46	42
8	65	52	44	38	63	51	44	38		50	43	38		49	43	38		48	42	38
9	61	48	40	35	59	47	40	35		46	39	35		45	39	35		44	39	34
10	57	44	37	32	56	44	37	32		43	36	32		42	36	32		41	36	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2184	2184	2184
5°	2195	2178	2189
10°	2192	2178	2184
15°	2187	2168	2175
20°	2172	2152	2158
25°	2143	2123	2124
30°	2091	2069	2060
35°	2005	1969	1924
40°	1877	1829	1665
45°	1695	1631	1301
50°	1503	1324	1100
55°	1312	1087	971
60°	1138	894	857
65°	998	718	791
70°	890	608	796
75°	868	642	890
80°	962	809	1020
85°	1003	865	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	4.3
10°-20°	220.6	12.5
20°-30°	330.0	18.6
30°-40°	372.5	21.0
40°-50°	316.0	17.8
50°-60°	213.8	12.1
60°-70°	127.6	7.2
70°-80°	79.9	4.5
80°-90°	33.6	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	627.6	35.4
0°-40°	1000.0	56.5
0°-60°	1529.8	86.4
0°-90°	1771.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1771.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	812	812	812	812	812	
5°	812	810	806	812	810	77
15°	785	784	778	784	781	221
25°	722	719	715	718	715	332
35°	610	606	599	594	586	380
45°	446	447	429	367	342	343
55°	280	266	232	207	207	252
65°	157	130	113	120	124	157
75°	84	74	62	81	86	90
85°	32	31	28	36	39	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	811.6	811.6	811.6	811.6	811.6
2.5°	814.4	812.0	808.3	813.2	812.8
5°	812.4	809.9	806.2	812.0	810.3
7.5°	808.7	806.6	802.9	808.3	806.6
10°	802.1	800.4	797.2	801.7	799.2
12.5°	795.1	793.9	789.8	793.9	791.4
15°	785.2	783.6	778.2	783.6	780.7
17.5°	772.9	770.8	766.3	770.8	768.4
20°	758.5	756.0	751.5	756.0	753.6
22.5°	741.2	739.2	735.0	739.2	735.9
25°	721.9	719.4	714.9	718.2	715.3
27.5°	699.7	696.4	692.3	694.7	693.1
30°	672.9	668.8	665.9	665.9	663.1
32.5°	643.7	640.8	635.9	633.0	629.3
35°	610.4	606.3	599.3	594.0	585.7
37.5°	574.6	569.7	561.1	547.5	536.4
40°	534.3	528.1	520.7	494.0	473.9
42.5°	491.1	489.9	477.1	431.5	403.5
45°	445.5	447.1	428.6	367.3	341.8
47.5°	399.4	405.2	371.4	311.4	298.2
50°	359.1	361.1	316.3	270.2	262.8
52.5°	317.5	314.3	269.8	237.7	232.4
55°	279.7	266.5	231.6	207.3	206.9
57.5°	246.4	222.1	197.8	179.8	181.8
60°	211.4	184.3	166.2	156.3	159.2
62.5°	180.6	154.7	138.6	135.7	140.7
65°	156.7	130.0	112.7	120.1	124.2
67.5°	134.1	111.5	91.7	109.4	111.1
70°	113.1	96.7	77.3	100.8	101.2
72.5°	95.8	85.6	67.0	91.3	92.5
75°	83.5	74.5	61.7	81.4	85.6
77.5°	73.2	63.8	57.2	70.3	77.3
80°	62.1	51.4	52.2	58.8	65.8
82.5°	47.7	39.9	41.5	48.5	53.5
85°	32.5	30.8	28.0	36.2	38.7
87.5°	17.3	16.5	14.4	20.6	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)