

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: P291352

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291352
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-28-A19/156-UNV-L83050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2801.0 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

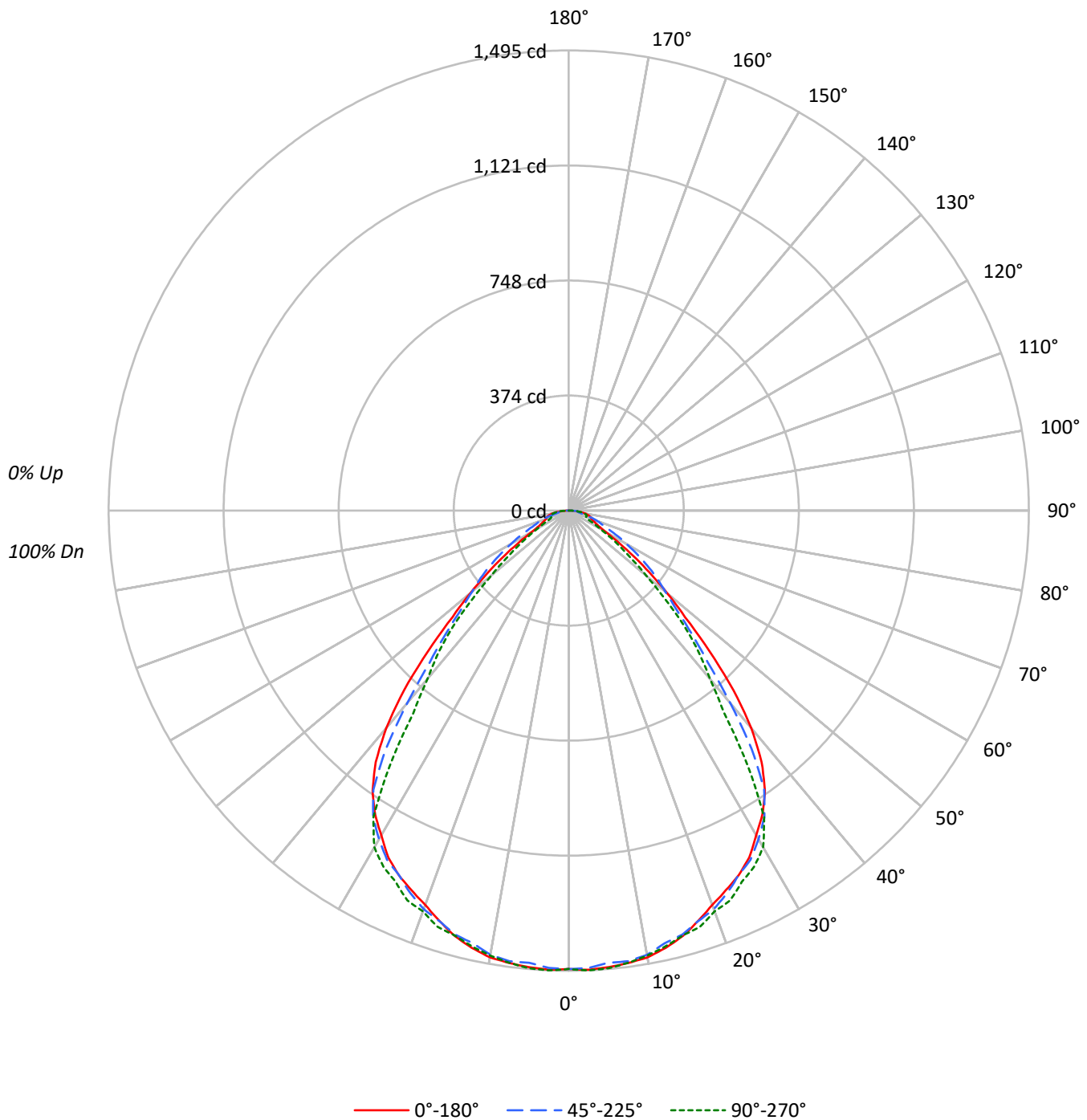
Input Watts (W): 22.227
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	100	108	105	102	99		101	98	96			97	95	93			93
2	103	96	90	86	100	94	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	73			80	75	71			77
4	89	79	71	65	87	77	70	65		75	69	64			73	68	63			71
5	83	71	64	58	81	70	63	58		68	62	57			67	61	57			65
6	77	65	58	52	75	64	57	52		63	56	51			61	55	51			60
7	72	60	52	47	70	59	52	47		58	51	46			56	51	46			55
8	67	55	48	43	66	55	47	42		53	47	42			52	46	42			51
9	63	51	44	39	62	51	44	39		50	43	39			49	43	38			48
10	60	48	40	36	58	47	40	36		46	40	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4008	4008	4008
5°	4022	3984	4030
10°	4028	4003	4010
15°	3987	3973	3982
20°	3904	3946	3968
25°	3880	3878	3952
30°	3785	3831	3925
35°	3650	3636	3341
40°	3241	2860	2505
45°	2460	2140	2025
50°	1745	1713	1374
55°	1194	1462	944
60°	738	1166	631
65°	608	898	457
70°	605	782	469
75°	727	560	627
80°	835	516	786
85°	790	911	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.3	5.0
10°-20°	403.4	14.4
20°-30°	606.6	21.7
30°-40°	661.3	23.6
40°-50°	463.0	16.5
50°-60°	262.1	9.4
60°-70°	143.4	5.1
70°-80°	86.9	3.1
80°-90°	33.0	1.2
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°	1151.3	41.1
0°-40°	1812.6	64.7
0°-60°	2537.7	90.6
0°-90°	2801.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2801.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1490	1490	1490	1490	1490	
5°	1489	1486	1475	1492	1492	142
15°	1431	1427	1426	1446	1429	402
25°	1307	1309	1306	1336	1331	600
35°	1111	1106	1107	1050	1017	685
45°	646	674	562	555	532	502
55°	254	305	312	309	201	233
65°	96	157	141	178	72	98
75°	70	101	54	106	60	72
85°	26	42	30	36	29	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1489.5	1489.5	1489.5	1489.5	1489.5
2.5°	1493.3	1491.4	1486.9	1495.9	1495.2
5°	1488.8	1486.3	1474.7	1492.0	1492.0
7.5°	1482.4	1476.0	1476.6	1486.3	1481.8
10°	1474.1	1463.2	1465.1	1467.7	1467.7
12.5°	1454.8	1444.6	1439.5	1447.8	1450.4
15°	1431.1	1427.3	1426.0	1446.5	1429.2
17.5°	1397.8	1406.1	1398.4	1415.1	1417.7
20°	1363.2	1379.2	1377.9	1389.4	1385.6
22.5°	1334.9	1345.2	1345.2	1359.3	1370.8
25°	1306.7	1309.3	1306.1	1336.2	1331.1
27.5°	1270.2	1268.3	1278.5	1293.9	1304.2
30°	1218.2	1218.9	1233.0	1253.5	1263.1
32.5°	1170.8	1165.0	1182.3	1191.3	1181.1
35°	1111.2	1106.0	1106.7	1050.3	1016.9
37.5°	1029.7	1034.2	975.2	872.0	828.4
40°	922.7	931.6	814.3	737.4	713.0
42.5°	793.1	795.7	667.5	642.5	626.4
45°	646.3	674.5	562.3	555.3	532.2
47.5°	512.3	564.9	471.3	475.8	420.6
50°	416.8	469.3	409.1	411.0	328.3
52.5°	329.6	380.9	361.0	355.2	257.8
55°	254.5	304.6	311.6	309.0	201.3
57.5°	187.2	241.1	261.6	271.2	155.2
60°	137.2	196.8	216.7	236.0	117.3
62.5°	109.0	170.6	177.6	205.8	91.0
65°	95.5	157.1	141.1	178.2	71.8
67.5°	85.3	149.4	114.8	157.7	62.8
70°	76.9	134.6	99.4	141.1	59.6
72.5°	76.9	118.0	78.2	125.0	60.3
75°	69.9	100.7	53.9	105.8	60.3
77.5°	62.2	85.9	40.4	85.9	56.4
80°	53.9	67.3	33.3	66.0	50.7
82.5°	39.8	50.7	28.9	49.4	41.0
85°	25.6	41.7	29.5	35.9	28.9
87.5°	12.2	21.2	18.6	18.0	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)