

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: P291511

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291511
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-LD5-36-A19/156-UNV-L92765-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2896.0 lumens
Efficiency: N/A
Efficacy: 99.8 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

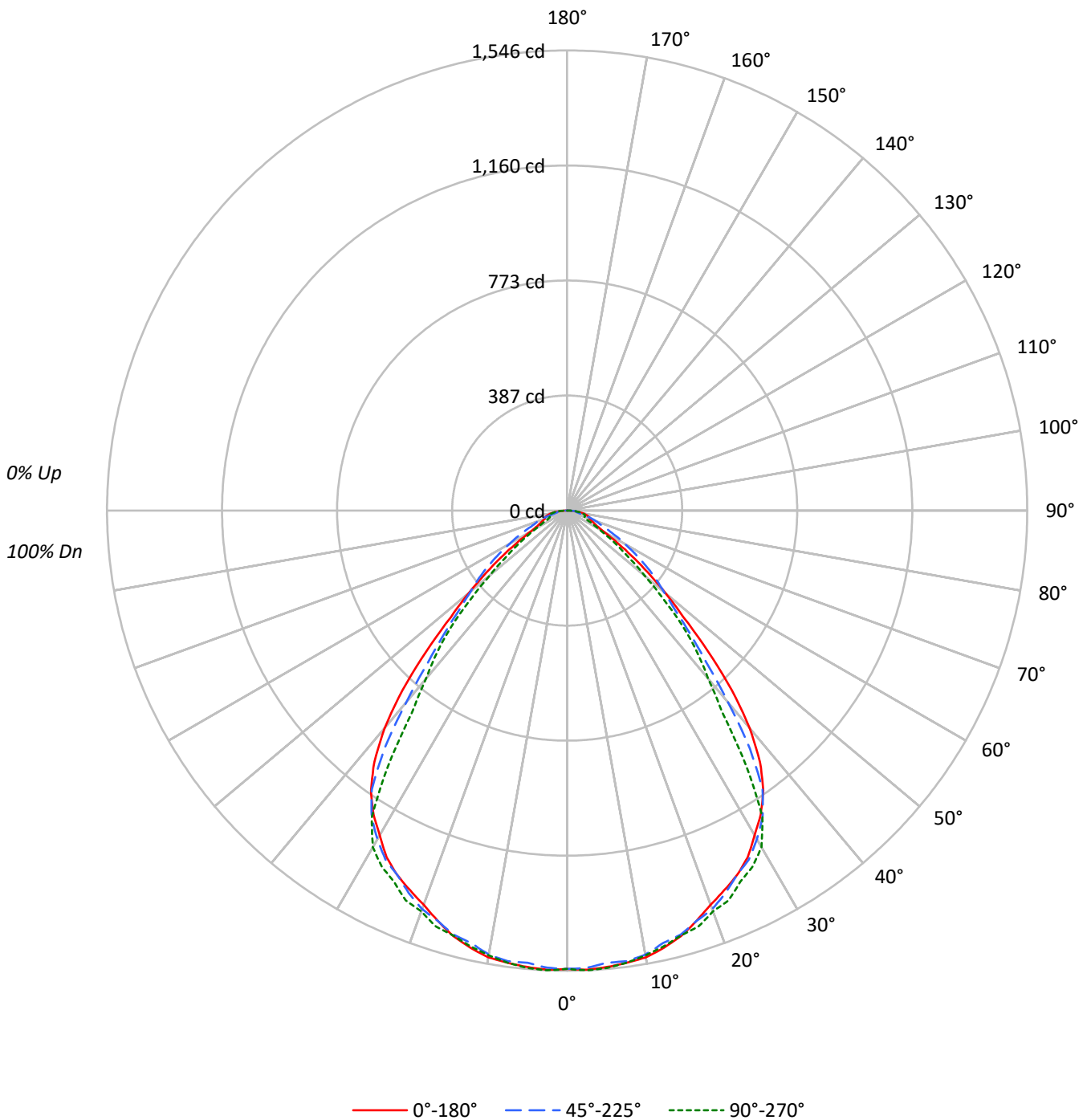
Input Watts (W): 29.016
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4144	4144	4144
5°	4158	4119	4167
10°	4165	4139	4146
15°	4122	4108	4117
20°	4036	4080	4103
25°	4011	4010	4086
30°	3914	3961	4058
35°	3774	3759	3454
40°	3351	2957	2590
45°	2543	2213	2094
50°	1804	1770	1421
55°	1235	1512	977
60°	764	1206	653
65°	629	928	472
70°	626	809	485
75°	752	579	648
80°	863	535	812
85°	818	942	920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.1	5.0
10°-20°	417.1	14.4
20°-30°	627.2	21.7
30°-40°	683.7	23.6
40°-50°	478.7	16.5
50°-60°	271.0	9.4
60°-70°	148.3	5.1
70°-80°	89.9	3.1
80°-90°	34.1	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°	1190.3	41.1
0°-40°	1874.0	64.7
0°-60°	2623.8	90.6
0°-90°	2896.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2896.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1540	1540	1540	1540	1540	
5°	1539	1537	1525	1543	1543	146
15°	1480	1476	1474	1496	1478	416
25°	1351	1354	1350	1382	1376	620
35°	1149	1144	1144	1086	1051	708
45°	668	697	581	574	550	519
55°	263	315	322	320	208	241
65°	99	162	146	184	74	101
75°	72	104	56	109	62	75
85°	26	43	30	37	30	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1540.0	1540.0	1540.0	1540.0	1540.0
2.5°	1544.0	1542.0	1537.3	1546.6	1545.9
5°	1539.3	1536.7	1524.7	1542.6	1542.6
7.5°	1532.7	1526.1	1526.7	1536.7	1532.0
10°	1524.1	1512.8	1514.8	1517.4	1517.4
12.5°	1504.2	1493.6	1488.3	1496.9	1499.5
15°	1479.7	1475.7	1474.4	1495.6	1477.7
17.5°	1445.2	1453.8	1445.8	1463.1	1465.7
20°	1409.4	1426.0	1424.6	1436.6	1432.6
22.5°	1380.2	1390.8	1390.8	1405.4	1417.3
25°	1351.0	1353.7	1350.4	1381.5	1376.2
27.5°	1313.3	1311.3	1321.9	1337.8	1348.4
30°	1259.6	1260.2	1274.8	1296.0	1306.0
32.5°	1210.5	1204.5	1222.4	1231.7	1221.1
35°	1148.9	1143.5	1144.2	1085.9	1051.4
37.5°	1064.7	1069.3	1008.3	901.6	856.5
40°	954.0	963.2	841.9	762.4	737.2
42.5°	820.0	822.7	690.1	664.3	647.7
45°	668.2	697.4	581.4	574.1	550.2
47.5°	529.7	584.0	487.3	491.9	434.9
50°	430.9	485.3	422.9	424.9	339.4
52.5°	340.7	393.8	373.2	367.3	266.5
55°	263.2	314.9	322.2	319.5	208.2
57.5°	193.6	249.3	270.5	280.4	160.4
60°	141.9	203.5	224.1	244.0	121.3
62.5°	112.7	176.3	183.6	212.8	94.1
65°	98.8	162.4	145.8	184.3	74.2
67.5°	88.2	154.5	118.7	163.1	65.0
70°	79.6	139.2	102.8	145.8	61.7
72.5°	79.6	122.0	80.9	129.3	62.3
75°	72.3	104.1	55.7	109.4	62.3
77.5°	64.3	88.8	41.8	88.8	58.3
80°	55.7	69.6	34.5	68.3	52.4
82.5°	41.1	52.4	29.8	51.0	42.4
85°	26.5	43.1	30.5	37.1	29.8
87.5°	12.6	21.9	19.2	18.6	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)