

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: P291497

Luminaire Tested: **14GR-LD5-28-A19/156-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291497
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-L92765-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2589.0 lumens
Efficiency: N/A
Efficacy: 113.6 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

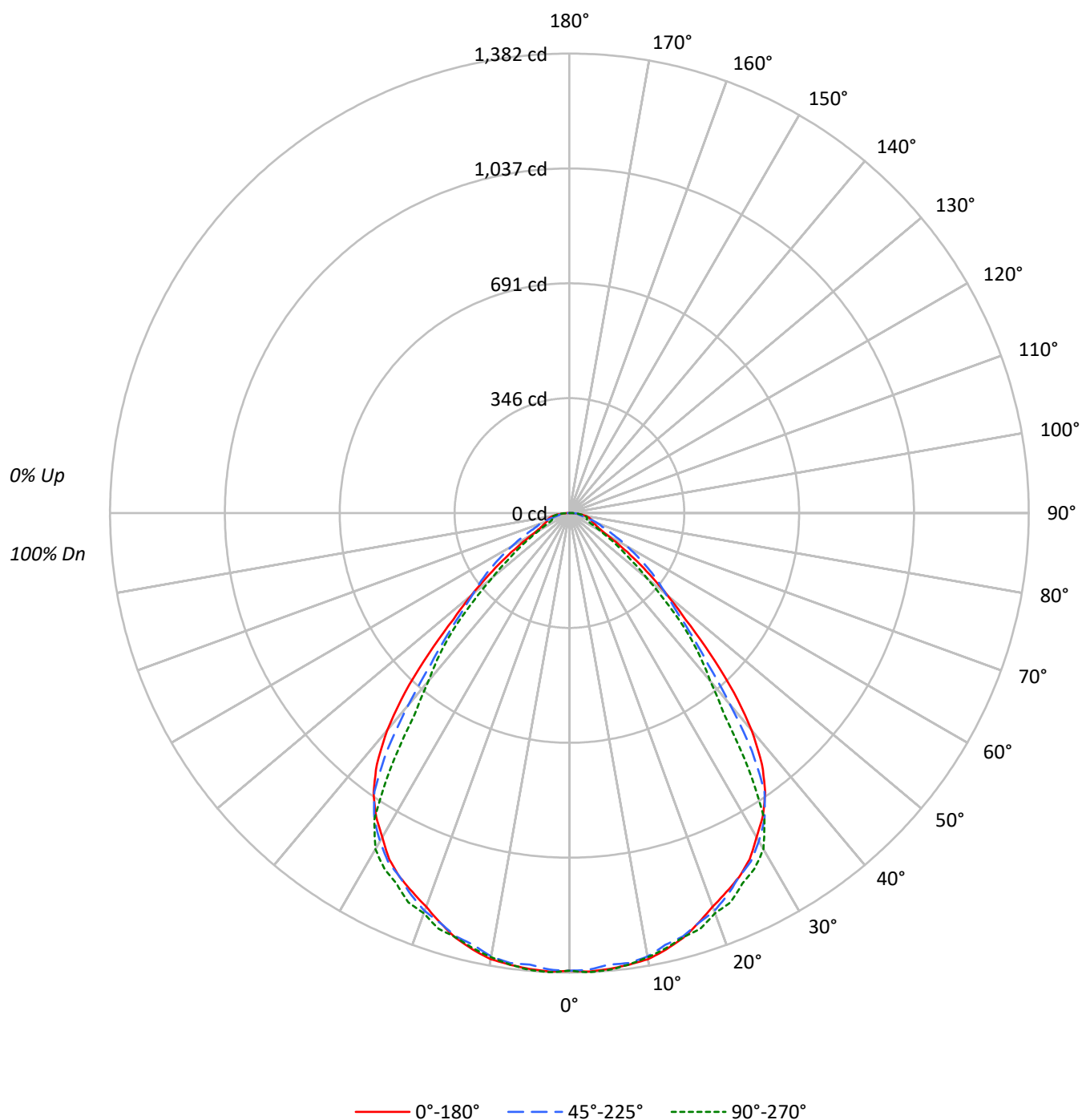
Input Watts (W): 22.785
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3705	3705	3705
5°	3717	3682	3725
10°	3723	3700	3707
15°	3685	3672	3680
20°	3608	3647	3668
25°	3586	3584	3653
30°	3499	3541	3628
35°	3374	3360	3088
40°	2996	2644	2315
45°	2273	1978	1872
50°	1613	1583	1270
55°	1104	1351	873
60°	682	1078	584
65°	562	830	423
70°	559	723	434
75°	672	518	579
80°	772	477	725
85°	732	843	824



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	5.0
10°-20°	372.8	14.4
20°-30°	560.7	21.7
30°-40°	611.2	23.6
40°-50°	428.0	16.5
50°-60°	242.3	9.4
60°-70°	132.6	5.1
70°-80°	80.3	3.1
80°-90°	30.5	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°	1064.1	41.1
0°-40°	1675.4	64.7
0°-60°	2345.6	90.6
0°-90°	2589.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2589.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1376	1374	1363	1379	1379	131
15°	1323	1319	1318	1337	1321	372
25°	1208	1210	1207	1235	1230	555
35°	1027	1022	1023	971	940	633
45°	597	624	520	513	492	464
55°	235	282	288	286	186	215
65°	88	145	130	165	66	91
75°	65	93	50	98	56	67
85°	24	38	27	33	27	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1376.7	1376.7	1376.7	1376.7	1376.7
2.5°	1380.3	1378.5	1374.4	1382.7	1382.1
5°	1376.1	1373.8	1363.1	1379.1	1379.1
7.5°	1370.2	1364.3	1364.9	1373.8	1369.6
10°	1362.5	1352.4	1354.2	1356.6	1356.6
12.5°	1344.7	1335.2	1330.5	1338.2	1340.6
15°	1322.8	1319.2	1318.1	1337.0	1321.0
17.5°	1292.0	1299.7	1292.6	1308.0	1310.4
20°	1260.0	1274.8	1273.6	1284.3	1280.7
22.5°	1233.9	1243.4	1243.4	1256.4	1267.1
25°	1207.8	1210.2	1207.2	1235.1	1230.3
27.5°	1174.0	1172.3	1181.7	1196.0	1205.5
30°	1126.0	1126.6	1139.7	1158.6	1167.5
32.5°	1082.2	1076.8	1092.8	1101.1	1091.7
35°	1027.1	1022.3	1022.9	970.8	939.9
37.5°	951.8	955.9	901.4	806.0	765.7
40°	852.8	861.1	752.7	681.5	659.0
42.5°	733.1	735.5	617.0	593.8	579.0
45°	597.4	623.5	519.8	513.2	491.9
47.5°	473.5	522.1	435.6	439.7	388.8
50°	385.2	433.8	378.1	379.9	303.4
52.5°	304.6	352.0	333.7	328.3	238.2
55°	235.3	281.5	288.0	285.7	186.1
57.5°	173.1	222.8	241.8	250.7	143.4
60°	126.8	181.9	200.3	218.1	108.5
62.5°	100.8	157.6	164.2	190.2	84.2
65°	88.3	145.2	130.4	164.8	66.4
67.5°	78.8	138.1	106.1	145.8	58.1
70°	71.1	124.5	91.9	130.4	55.1
72.5°	71.1	109.0	72.3	115.6	55.7
75°	64.6	93.0	49.8	97.8	55.7
77.5°	57.5	79.4	37.3	79.4	52.2
80°	49.8	62.2	30.8	61.0	46.8
82.5°	36.7	46.8	26.7	45.6	37.9
85°	23.7	38.5	27.3	33.2	26.7
87.5°	11.3	19.6	17.2	16.6	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)