

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: P291501

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291501
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-LD5-32-A19/156-UNV-L92765-W2A1-U-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2491.0 lumens
Efficiency: N/A
Efficacy: 97.4 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

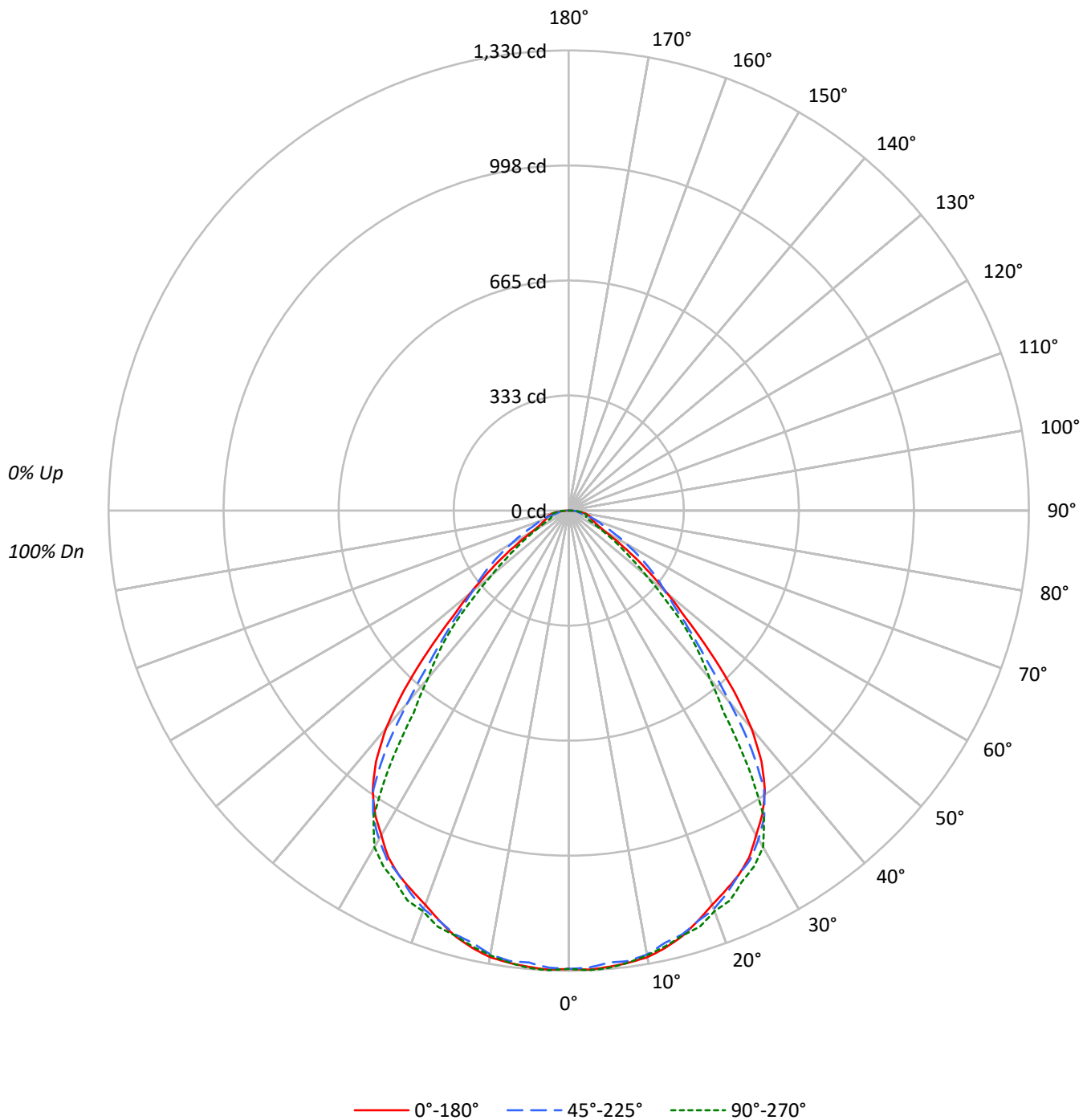
Input Watts (W): 25.575
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3564	3564	3564
5°	3576	3543	3584
10°	3582	3560	3566
15°	3546	3533	3541
20°	3472	3509	3529
25°	3450	3449	3515
30°	3366	3407	3490
35°	3246	3233	2971
40°	2882	2544	2227
45°	2187	1903	1801
50°	1551	1523	1222
55°	1062	1300	840
60°	657	1037	561
65°	541	798	407
70°	538	696	417
75°	647	498	557
80°	742	460	697
85°	704	809	794



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.7	5.0
10°-20°	358.7	14.4
20°-30°	539.5	21.7
30°-40°	588.1	23.6
40°-50°	411.8	16.5
50°-60°	233.1	9.4
60°-70°	127.5	5.1
70°-80°	77.3	3.1
80°-90°	29.3	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°	1023.9	41.1
0°-40°	1612.0	64.7
0°-60°	2256.8	90.6
0°-90°	2491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2491.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1325	1325	1325	1325	1325	
5°	1324	1322	1312	1327	1327	126
15°	1273	1269	1268	1286	1271	358
25°	1162	1164	1162	1188	1184	534
35°	988	984	984	934	904	609
45°	575	600	500	494	473	446
55°	226	271	277	275	179	207
65°	85	140	125	158	64	87
75°	62	90	48	94	54	64
85°	23	37	26	32	26	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1324.6	1324.6	1324.6	1324.6	1324.6
2.5°	1328.0	1326.3	1322.3	1330.3	1329.7
5°	1324.0	1321.8	1311.5	1326.9	1326.9
7.5°	1318.3	1312.6	1313.2	1321.8	1317.8
10°	1310.9	1301.2	1302.9	1305.2	1305.2
12.5°	1293.8	1284.7	1280.1	1287.6	1289.8
15°	1272.7	1269.3	1268.2	1286.4	1271.0
17.5°	1243.1	1250.5	1243.6	1258.5	1260.8
20°	1212.3	1226.5	1225.4	1235.7	1232.2
22.5°	1187.2	1196.3	1196.3	1208.9	1219.1
25°	1162.1	1164.4	1161.5	1188.3	1183.8
27.5°	1129.6	1127.9	1137.0	1150.7	1159.8
30°	1083.4	1084.0	1096.5	1114.8	1123.3
32.5°	1041.2	1036.1	1051.5	1059.5	1050.3
35°	988.2	983.6	984.2	934.0	904.4
37.5°	915.8	919.8	867.3	775.5	736.7
40°	820.5	828.5	724.2	655.8	634.1
42.5°	705.4	707.6	593.6	571.4	557.1
45°	574.8	599.9	500.1	493.8	473.3
47.5°	455.6	502.4	419.1	423.1	374.1
50°	370.6	417.4	363.8	365.5	292.0
52.5°	293.1	338.7	321.0	315.9	229.2
55°	226.4	270.9	277.1	274.8	179.0
57.5°	166.5	214.4	232.6	241.2	138.0
60°	122.0	175.1	192.7	209.8	104.3
62.5°	96.9	151.7	158.0	183.0	81.0
65°	85.0	139.7	125.4	158.5	63.9
67.5°	75.8	132.9	102.1	140.3	55.9
70°	68.4	119.7	88.4	125.4	53.0
72.5°	68.4	104.9	69.6	111.2	53.6
75°	62.2	89.5	47.9	94.1	53.6
77.5°	55.3	76.4	35.9	76.4	50.2
80°	47.9	59.9	29.7	58.7	45.0
82.5°	35.4	45.0	25.7	43.9	36.5
85°	22.8	37.1	26.2	31.9	25.7
87.5°	10.8	18.8	16.5	16.0	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)