

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: P291066

Luminaire Tested: **14GR-LD5-32-A-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291066
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-LD5-32-A-UNV-L93050-W2A1-U-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3087.0 lumens
Efficiency: N/A
Efficacy: 115.3 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

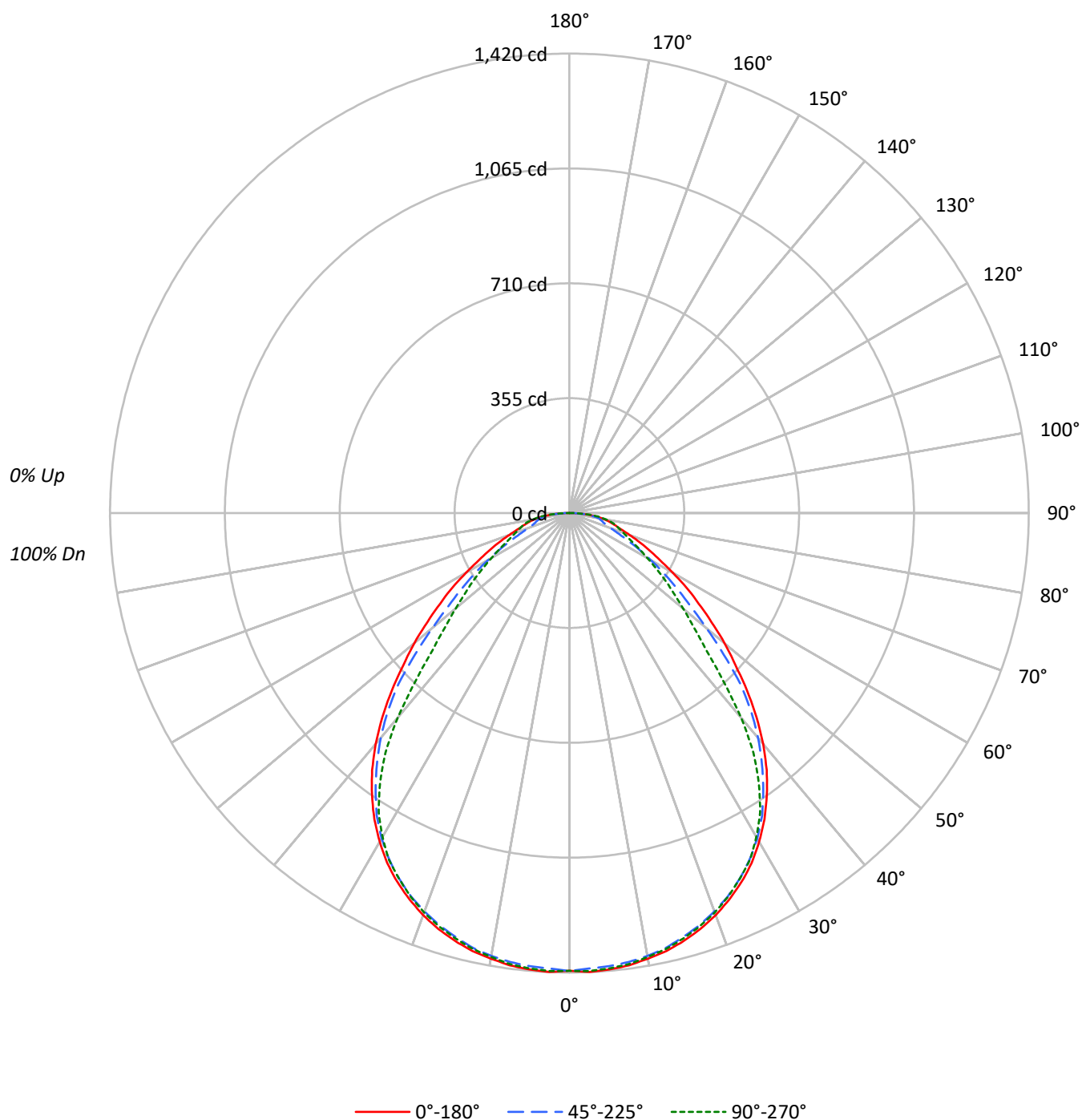
Input Watts (W): 26.784
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3807	3807	3807
5°	3825	3796	3815
10°	3820	3797	3807
15°	3813	3779	3791
20°	3786	3751	3761
25°	3736	3700	3702
30°	3645	3607	3591
35°	3495	3432	3354
40°	3272	3189	2902
45°	2955	2843	2267
50°	2620	2308	1918
55°	2287	1894	1692
60°	1983	1559	1493
65°	1740	1251	1379
70°	1552	1061	1388
75°	1513	1118	1550
80°	1678	1412	1777
85°	1748	1507	2081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	4.3
10°-20°	384.5	12.5
20°-30°	575.2	18.6
30°-40°	649.3	21.0
40°-50°	550.8	17.8
50°-60°	372.7	12.1
60°-70°	222.5	7.2
70°-80°	139.3	4.5
80°-90°	58.6	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°	1093.9	35.4
0°-40°	1743.1	56.5
0°-60°	2666.6	86.4
0°-90°	3087.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3087.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1415	1415	1415	1415	1415	
5°	1416	1412	1405	1415	1412	135
15°	1369	1366	1356	1366	1361	386
25°	1258	1254	1246	1252	1247	579
35°	1064	1057	1045	1035	1021	663
45°	776	779	747	640	596	598
55°	488	465	404	361	361	439
65°	273	227	196	209	216	273
75°	146	130	108	142	149	156
85°	57	54	49	63	67	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1414.6	1414.6	1414.6	1414.6	1414.6
2.5°	1419.6	1415.3	1408.9	1417.5	1416.8
5°	1416.0	1411.7	1405.3	1415.3	1412.4
7.5°	1409.6	1406.0	1399.5	1408.9	1406.0
10°	1398.1	1395.2	1389.5	1397.4	1393.1
12.5°	1385.9	1383.8	1376.6	1383.8	1379.5
15°	1368.7	1365.8	1356.5	1365.8	1360.8
17.5°	1347.2	1343.6	1335.7	1343.6	1339.3
20°	1322.1	1317.8	1309.9	1317.8	1313.5
22.5°	1292.0	1288.4	1281.2	1288.4	1282.7
25°	1258.3	1254.0	1246.1	1251.8	1246.8
27.5°	1219.6	1213.8	1206.7	1211.0	1208.1
30°	1173.0	1165.8	1160.8	1160.8	1155.8
32.5°	1122.1	1117.1	1108.4	1103.4	1097.0
35°	1064.0	1056.8	1044.6	1035.3	1021.0
37.5°	1001.6	993.0	978.0	954.3	934.9
40°	931.4	920.6	907.7	861.1	826.0
42.5°	856.1	853.9	831.7	752.1	703.4
45°	776.5	779.4	747.1	640.3	595.8
47.5°	696.2	706.2	647.4	542.8	519.8
50°	625.9	629.5	551.4	471.1	458.1
52.5°	553.5	547.8	470.3	414.4	405.1
55°	487.5	464.6	403.7	361.4	360.6
57.5°	429.5	387.2	344.9	313.3	316.9
60°	368.5	321.2	289.7	272.5	277.5
62.5°	314.8	269.6	241.6	236.6	245.2
65°	273.2	226.6	196.5	209.4	216.5
67.5°	233.7	194.3	159.9	190.7	193.6
70°	197.2	168.5	134.8	175.7	176.4
72.5°	167.1	149.1	116.9	159.2	161.3
75°	145.5	129.8	107.5	142.0	149.1
77.5°	127.6	111.1	99.7	122.6	134.8
80°	108.3	89.6	91.1	102.5	114.7
82.5°	83.2	69.5	72.4	84.6	93.2
85°	56.6	53.8	48.8	63.1	67.4
87.5°	30.1	28.7	25.1	35.8	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)