

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: P290646

Luminaire Tested: **14GR-LD5-43-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-F1-UNV-L82765-W2A1-U-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4004.0 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

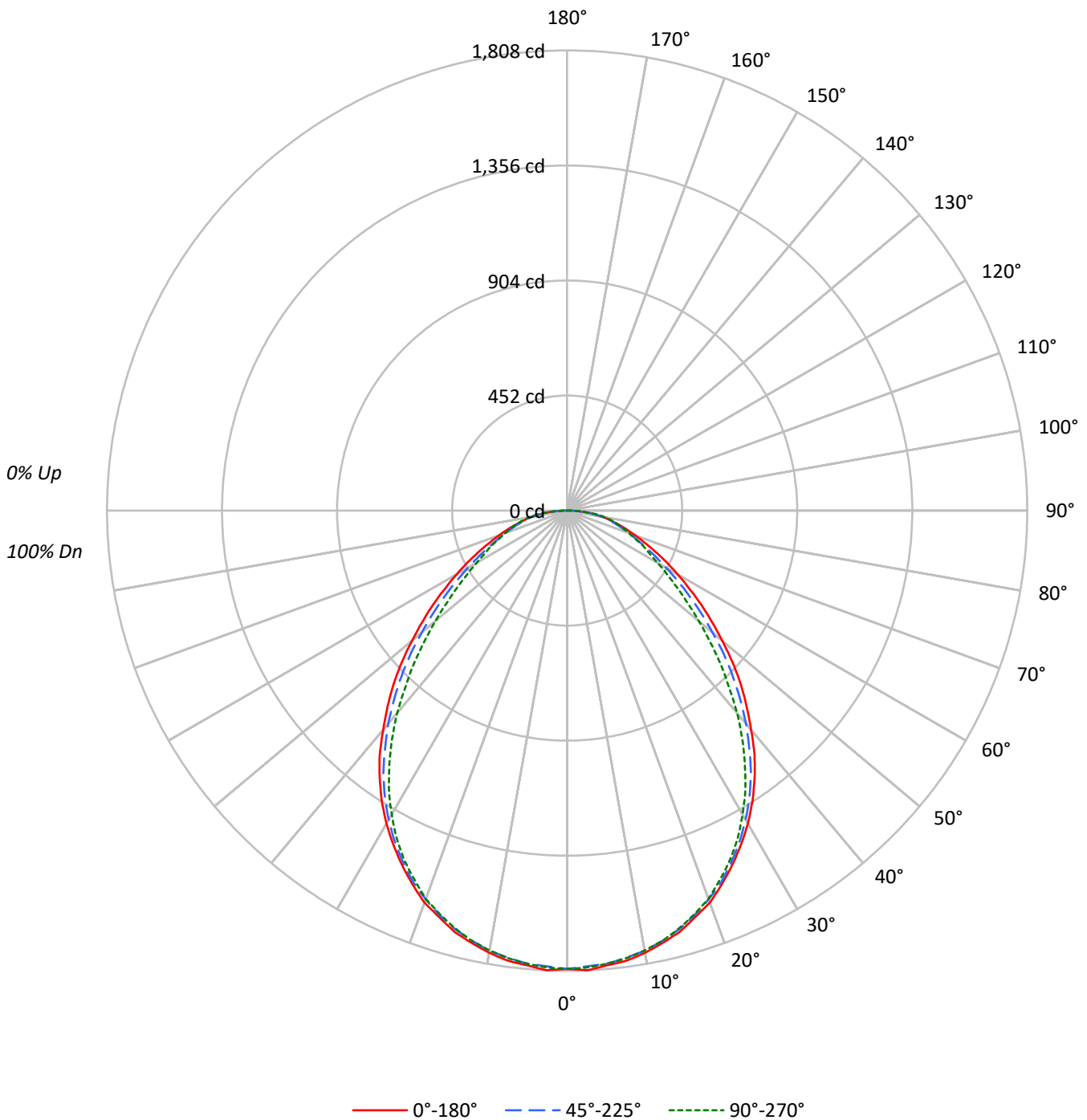
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4846	4846	4846
5°	4844	4827	4830
10°	4820	4797	4795
15°	4771	4743	4735
20°	4694	4655	4649
25°	4559	4529	4497
30°	4412	4358	4283
35°	4218	4137	4001
40°	3949	3840	3649
45°	3667	3503	3248
50°	3327	3120	2828
55°	3010	2756	2472
60°	2702	2415	2203
65°	2425	2157	2110
70°	2238	2007	2029
75°	2138	2014	2128
80°	2162	2148	2318
85°	2238	2211	2464



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	4.2
10°-20°	480.6	12.0
20°-30°	701.8	17.5
30°-40°	782.0	19.5
40°-50°	704.6	17.6
50°-60°	526.7	13.2
60°-70°	347.4	8.7
70°-80°	212.1	5.3
80°-90°	78.7	2.0
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°	1352.4	33.8
0°-40°	2134.4	53.3
0°-60°	3365.8	84.1
0°-90°	4004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1801	1801	1801	1801	1801	
5°	1793	1792	1787	1796	1788	170
15°	1713	1706	1702	1713	1700	482
25°	1536	1530	1525	1528	1514	707
35°	1284	1273	1259	1237	1218	801
45°	964	954	920	878	854	742
55°	642	631	587	539	527	575
65°	381	369	339	325	331	382
75°	206	202	194	200	205	220
85°	72	70	72	79	80	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1800.7	1800.7	1800.7	1800.7	1800.7
2.5°	1808.0	1799.8	1792.4	1803.5	1797.0
5°	1793.4	1791.5	1786.9	1796.1	1787.9
7.5°	1784.2	1777.8	1772.2	1783.3	1774.1
10°	1764.0	1760.3	1755.7	1764.9	1754.8
12.5°	1739.2	1735.5	1730.9	1742.0	1730.9
15°	1712.6	1706.2	1702.5	1712.6	1699.7
17.5°	1674.0	1671.3	1665.8	1675.9	1663.0
20°	1639.2	1629.1	1625.4	1632.7	1623.6
22.5°	1588.7	1581.3	1580.4	1585.0	1569.4
25°	1535.5	1530.0	1525.4	1528.1	1514.4
27.5°	1479.5	1472.1	1466.6	1465.7	1451.0
30°	1419.8	1410.6	1402.4	1395.0	1378.5
32.5°	1354.7	1343.6	1332.6	1320.7	1303.3
35°	1284.0	1273.0	1259.2	1237.2	1217.9
37.5°	1209.6	1196.8	1174.8	1149.1	1129.8
40°	1124.3	1117.9	1093.1	1060.0	1038.9
42.5°	1044.4	1037.1	1005.9	969.2	940.7
45°	963.7	953.6	920.5	878.3	853.5
47.5°	881.1	871.0	834.3	782.0	759.9
50°	794.8	789.3	745.2	697.5	675.5
52.5°	715.9	709.5	664.5	616.8	596.6
55°	641.5	631.4	587.4	538.7	526.8
57.5°	567.2	556.2	514.9	473.6	465.3
60°	502.0	488.3	448.8	416.7	409.3
62.5°	440.5	424.9	391.9	367.1	363.4
65°	380.9	369.0	338.7	324.9	331.3
67.5°	329.5	317.6	295.5	290.0	288.2
70°	284.5	273.5	255.1	257.0	257.9
72.5°	243.2	236.8	223.0	227.6	231.3
75°	205.6	201.9	193.7	200.1	204.7
77.5°	171.6	168.9	165.2	170.7	178.1
80°	139.5	137.7	138.6	142.3	149.6
82.5°	107.4	103.7	106.5	113.8	118.4
85°	72.5	69.8	71.6	78.9	79.8
87.5°	34.0	34.0	33.0	38.5	38.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)