

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: P290584

Luminaire Tested: **14GR-LD5-40-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290584
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-LD5-40-F1-UNV-L83050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4295.0 lumens
Efficiency: N/A
Efficacy: 124.8 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

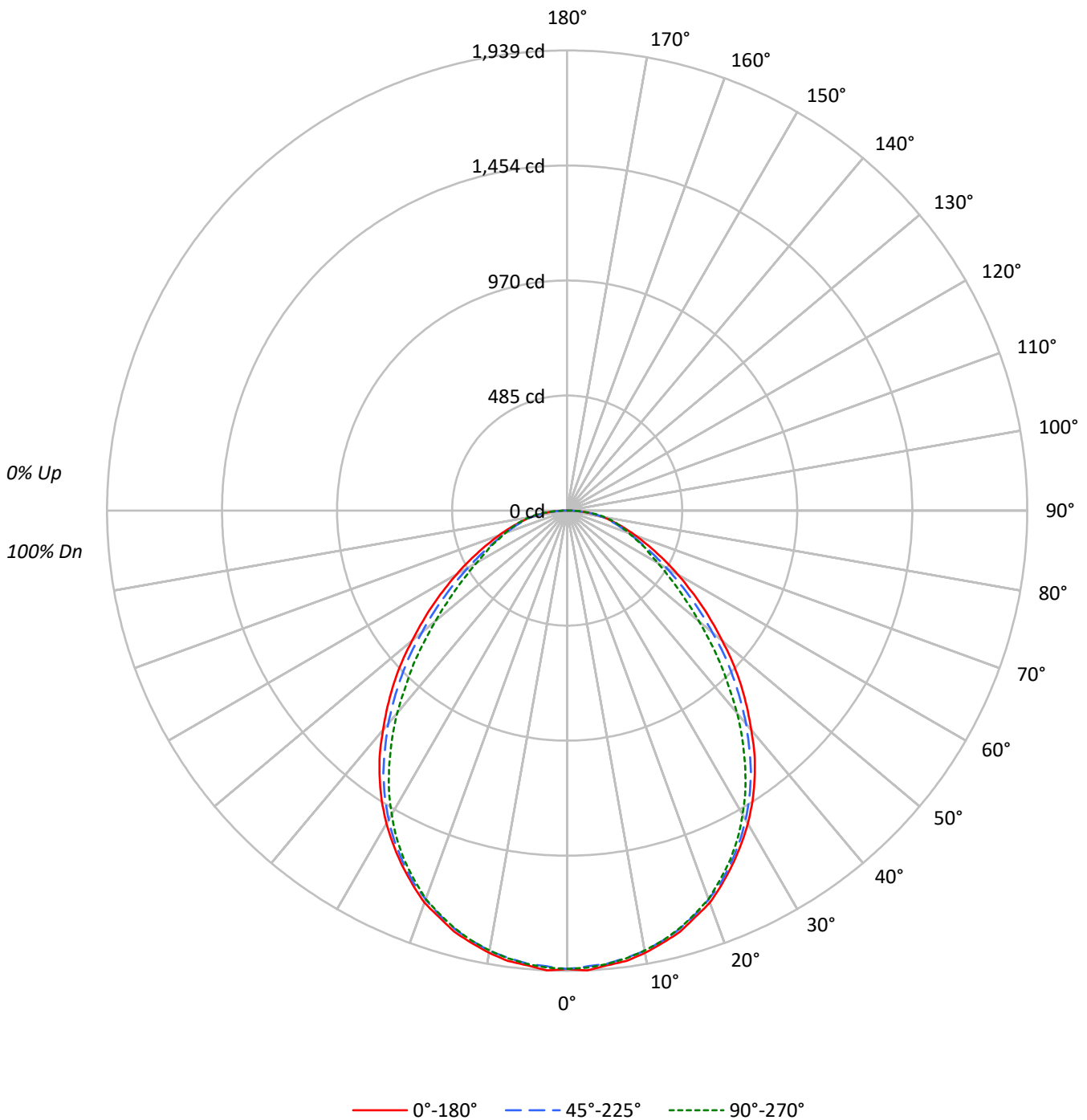
Input Watts (W): 34.41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5198	5198	5198
5°	5196	5178	5180
10°	5170	5146	5143
15°	5118	5088	5080
20°	5035	4993	4987
25°	4891	4858	4823
30°	4732	4674	4595
35°	4525	4437	4292
40°	4236	4119	3915
45°	3934	3758	3484
50°	3569	3347	3033
55°	3229	2956	2651
60°	2898	2591	2363
65°	2602	2313	2263
70°	2401	2153	2176
75°	2293	2159	2282
80°	2318	2304	2487
85°	2402	2371	2646



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.3	4.2
10°-20°	515.5	12.0
20°-30°	752.8	17.5
30°-40°	838.9	19.5
40°-50°	755.8	17.6
50°-60°	565.0	13.2
60°-70°	372.7	8.7
70°-80°	227.5	5.3
80°-90°	84.4	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°	1450.7	33.8
0°-40°	2289.6	53.3
0°-60°	3610.4	84.1
0°-90°	4295.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4295.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1924	1922	1917	1927	1918	183
15°	1837	1830	1826	1837	1823	517
25°	1647	1641	1636	1639	1624	758
35°	1377	1366	1351	1327	1306	859
45°	1034	1023	987	942	916	796
55°	688	677	630	578	565	616
65°	409	396	363	348	355	410
75°	220	217	208	215	220	236
85°	78	75	77	85	86	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.6	1931.6	1931.6	1931.6	1931.6
2.5°	1939.4	1930.6	1922.7	1934.5	1927.6
5°	1923.7	1921.7	1916.8	1926.6	1917.8
7.5°	1913.8	1907.0	1901.1	1912.9	1903.0
10°	1892.2	1888.3	1883.3	1893.2	1882.3
12.5°	1865.6	1861.7	1856.7	1868.6	1856.7
15°	1837.1	1830.2	1826.2	1837.1	1823.3
17.5°	1795.7	1792.8	1786.8	1797.7	1783.9
20°	1758.3	1747.5	1743.5	1751.4	1741.6
22.5°	1704.2	1696.3	1695.3	1700.2	1683.5
25°	1647.1	1641.1	1636.2	1639.2	1624.4
27.5°	1587.0	1579.1	1573.2	1572.2	1556.5
30°	1523.0	1513.2	1504.3	1496.4	1478.7
32.5°	1453.1	1441.3	1429.5	1416.7	1398.0
35°	1377.3	1365.5	1350.7	1327.1	1306.4
37.5°	1297.6	1283.8	1260.1	1232.6	1211.9
40°	1206.0	1199.1	1172.5	1137.1	1114.4
42.5°	1120.4	1112.5	1079.0	1039.6	1009.1
45°	1033.7	1022.9	987.4	942.2	915.6
47.5°	945.1	934.3	894.9	838.8	815.2
50°	852.6	846.7	799.4	748.2	724.6
52.5°	767.9	761.0	712.8	661.6	639.9
55°	688.2	677.3	630.1	577.9	565.1
57.5°	608.4	596.6	552.3	508.0	499.1
60°	538.5	523.7	481.4	447.0	439.1
62.5°	472.6	455.8	420.4	393.8	389.9
65°	408.6	395.8	363.3	348.5	355.4
67.5°	353.4	340.6	317.0	311.1	309.1
70°	305.2	293.4	273.7	275.7	276.6
72.5°	260.9	254.0	239.2	244.2	248.1
75°	220.5	216.6	207.7	214.6	219.5
77.5°	184.1	181.1	177.2	183.1	191.0
80°	149.6	147.7	148.7	152.6	160.5
82.5°	115.2	111.2	114.2	122.1	127.0
85°	77.8	74.8	76.8	84.7	85.7
87.5°	36.4	36.4	35.4	41.3	41.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)