

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: P290559

Luminaire Tested: **14GR-LD5-20-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290559
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-LD5-20-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: 2164.0 lumens
Efficiency: N/A
Efficacy: 136.1 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

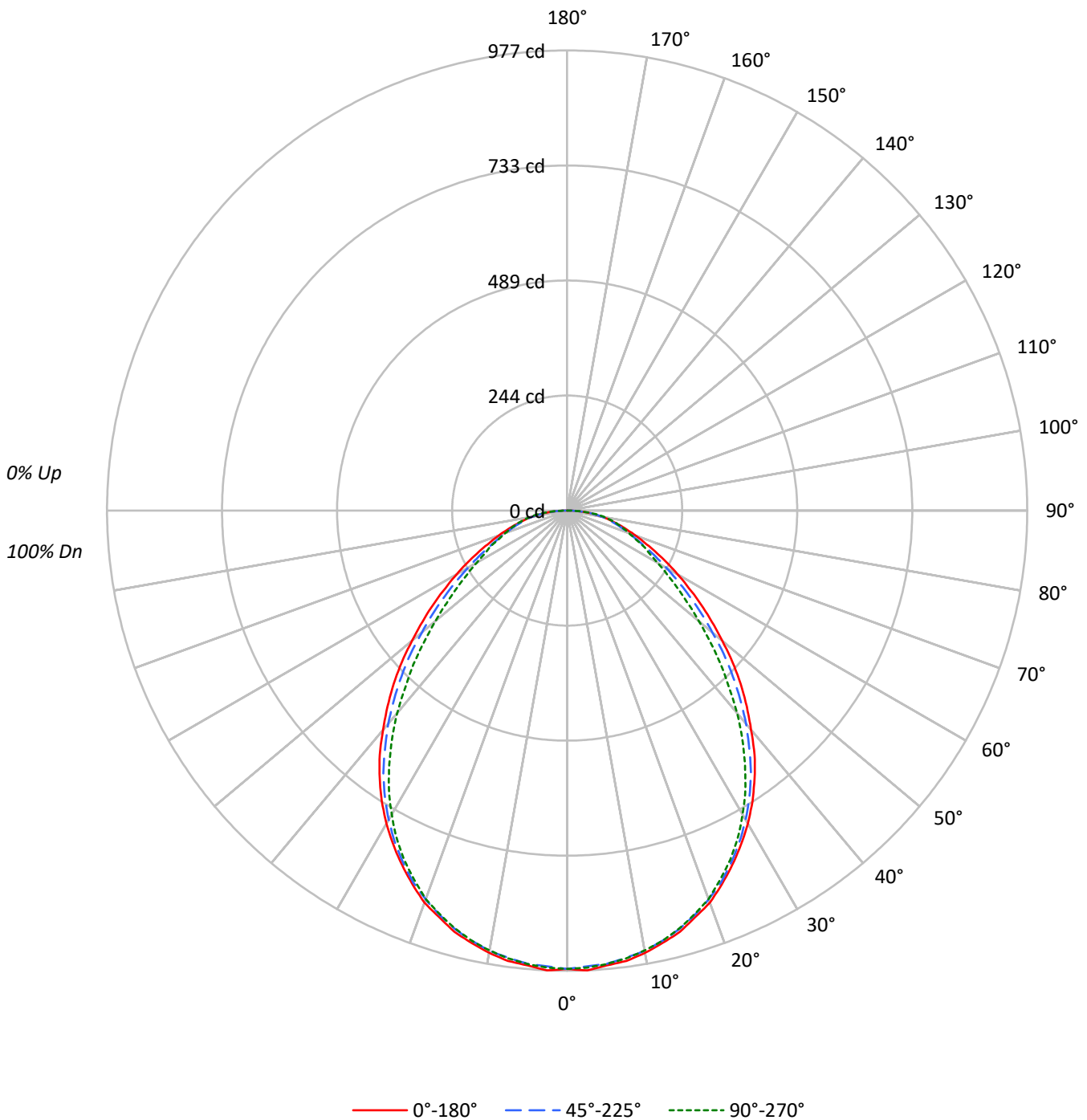
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2619	2619	2619
5°	2618	2609	2610
10°	2605	2593	2591
15°	2579	2563	2559
20°	2537	2516	2513
25°	2464	2448	2430
30°	2385	2355	2315
35°	2280	2235	2162
40°	2134	2075	1972
45°	1982	1893	1756
50°	1798	1686	1528
55°	1627	1490	1336
60°	1460	1306	1190
65°	1311	1165	1140
70°	1210	1085	1097
75°	1155	1089	1150
80°	1168	1161	1254
85°	1210	1195	1334



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	4.2
10°-20°	259.7	12.0
20°-30°	379.3	17.5
30°-40°	422.7	19.5
40°-50°	380.8	17.6
50°-60°	284.7	13.2
60°-70°	187.8	8.7
70°-80°	114.6	5.3
80°-90°	42.5	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°	730.9	33.8
0°-40°	1153.6	53.3
0°-60°	1819.1	84.1
0°-90°	2164.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2164.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	969	968	966	971	966	92
15°	926	922	920	926	919	261
25°	830	827	824	826	818	382
35°	694	688	680	669	658	433
45°	521	515	498	475	461	401
55°	347	341	318	291	285	311
65°	206	199	183	176	179	206
75°	111	109	105	108	111	119
85°	39	38	39	43	43	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.2	973.2	973.2	973.2	973.2
2.5°	977.2	972.7	968.7	974.7	971.2
5°	969.2	968.2	965.8	970.7	966.3
7.5°	964.3	960.8	957.8	963.8	958.8
10°	953.4	951.4	948.9	953.9	948.4
12.5°	940.0	938.0	935.5	941.5	935.5
15°	925.6	922.1	920.1	925.6	918.6
17.5°	904.8	903.3	900.3	905.7	898.8
20°	885.9	880.4	878.5	882.4	877.5
22.5°	858.6	854.7	854.2	856.6	848.2
25°	829.9	826.9	824.4	825.9	818.4
27.5°	799.6	795.6	792.7	792.2	784.2
30°	767.4	762.4	757.9	754.0	745.0
32.5°	732.1	726.2	720.2	713.8	704.4
35°	693.9	688.0	680.5	668.6	658.2
37.5°	653.8	646.8	634.9	621.0	610.6
40°	607.6	604.2	590.8	572.9	561.5
42.5°	564.5	560.5	543.6	523.8	508.4
45°	520.8	515.4	497.5	474.7	461.3
47.5°	476.2	470.7	450.9	422.6	410.7
50°	429.6	426.6	402.8	377.0	365.1
52.5°	386.9	383.4	359.1	333.3	322.4
55°	346.7	341.3	317.5	291.2	284.7
57.5°	306.5	300.6	278.3	256.0	251.5
60°	271.3	263.9	242.6	225.2	221.2
62.5°	238.1	229.7	211.8	198.4	196.4
65°	205.9	199.4	183.0	175.6	179.1
67.5°	178.1	171.6	159.7	156.7	155.8
70°	153.8	147.8	137.9	138.9	139.4
72.5°	131.4	128.0	120.5	123.0	125.0
75°	111.1	109.1	104.7	108.1	110.6
77.5°	92.8	91.3	89.3	92.3	96.2
80°	75.4	74.4	74.9	76.9	80.9
82.5°	58.0	56.1	57.5	61.5	64.0
85°	39.2	37.7	38.7	42.7	43.2
87.5°	18.4	18.4	17.9	20.8	20.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)