

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: P291056

Luminaire Tested: **14GR-LD5-24-A-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291056
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-LD5-24-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: 2278.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

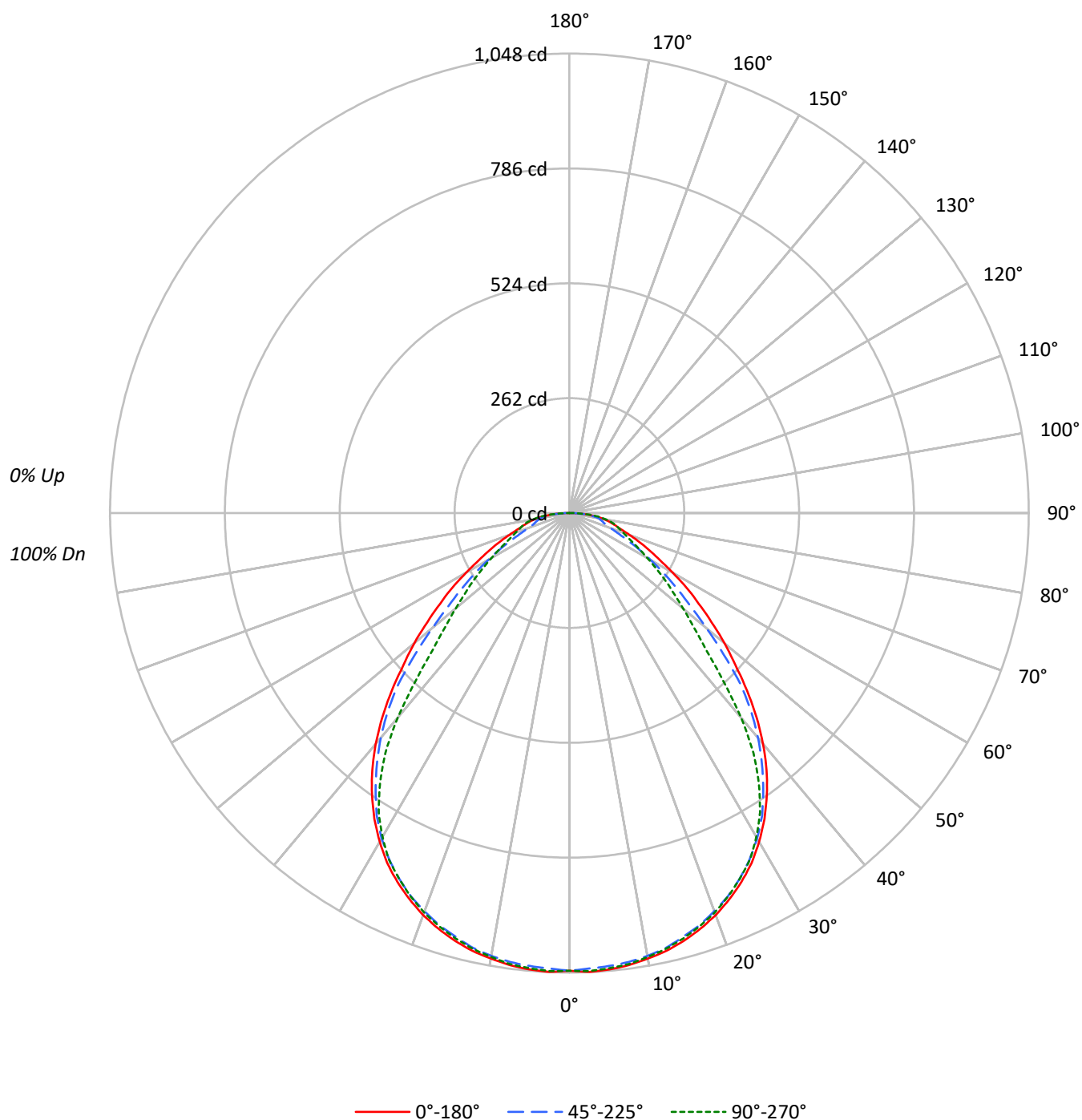
Input Watts (W): 18.972
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74		
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64		
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44		
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36		
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33		
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2809	2809	2809
5°	2823	2801	2816
10°	2819	2802	2809
15°	2814	2789	2798
20°	2794	2768	2776
25°	2757	2730	2732
30°	2690	2662	2650
35°	2579	2532	2475
40°	2414	2353	2141
45°	2181	2098	1673
50°	1934	1703	1415
55°	1688	1398	1248
60°	1463	1150	1102
65°	1284	923	1018
70°	1145	783	1024
75°	1117	826	1144
80°	1238	1041	1313
85°	1291	1112	1535



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	4.3
10°-20°	283.7	12.5
20°-30°	424.4	18.6
30°-40°	479.1	21.0
40°-50°	406.4	17.8
50°-60°	275.0	12.1
60°-70°	164.2	7.2
70°-80°	102.8	4.5
80°-90°	43.3	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°	807.2	35.4
0°-40°	1286.3	56.5
0°-60°	1967.8	86.4
0°-90°	2278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2278.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1045	1042	1037	1044	1042	99
15°	1010	1008	1001	1008	1004	285
25°	928	925	920	924	920	427
35°	785	780	771	764	753	489
45°	573	575	551	472	440	442
55°	360	343	298	267	266	324
65°	202	167	145	154	160	201
75°	107	96	79	105	110	115
85°	42	40	36	47	50	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1043.9	1043.9	1043.9	1043.9	1043.9
2.5°	1047.6	1044.4	1039.6	1046.0	1045.5
5°	1044.9	1041.8	1037.0	1044.4	1042.3
7.5°	1040.2	1037.5	1032.8	1039.6	1037.5
10°	1031.7	1029.6	1025.4	1031.2	1028.0
12.5°	1022.7	1021.1	1015.8	1021.1	1018.0
15°	1010.0	1007.9	1001.0	1007.9	1004.2
17.5°	994.1	991.5	985.7	991.5	988.3
20°	975.6	972.5	966.6	972.5	969.3
22.5°	953.4	950.8	945.5	950.8	946.5
25°	928.5	925.4	919.5	923.8	920.1
27.5°	900.0	895.7	890.4	893.6	891.5
30°	865.6	860.3	856.6	856.6	852.9
32.5°	828.0	824.3	818.0	814.3	809.5
35°	785.2	779.9	770.9	764.0	753.4
37.5°	739.1	732.8	721.7	704.2	689.9
40°	687.3	679.3	669.8	635.4	609.5
42.5°	631.7	630.1	613.7	555.0	519.0
45°	573.0	575.1	551.3	472.5	439.7
47.5°	513.7	521.1	477.8	400.5	383.6
50°	461.9	464.5	406.9	347.6	338.1
52.5°	408.5	404.2	347.1	305.8	298.9
55°	359.8	342.8	297.9	266.7	266.1
57.5°	316.9	285.7	254.5	231.2	233.9
60°	271.9	237.0	213.7	201.1	204.8
62.5°	232.3	198.9	178.3	174.6	180.9
65°	201.6	167.2	145.0	154.5	159.8
67.5°	172.5	143.4	118.0	140.7	142.9
70°	145.5	124.3	99.5	129.6	130.2
72.5°	123.3	110.0	86.2	117.5	119.0
75°	107.4	95.8	79.4	104.8	110.0
77.5°	94.2	82.0	73.5	90.5	99.5
80°	79.9	66.1	67.2	75.7	84.7
82.5°	61.4	51.3	53.4	62.4	68.8
85°	41.8	39.7	36.0	46.6	49.7
87.5°	22.2	21.2	18.5	26.5	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)