

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: P291102

Luminaire Tested: **14GR-LD5-28-A-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291102
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-LD5-28-A-UNV-L92765-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2492.0 lumens
Efficiency: N/A
Efficacy: 111.6 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

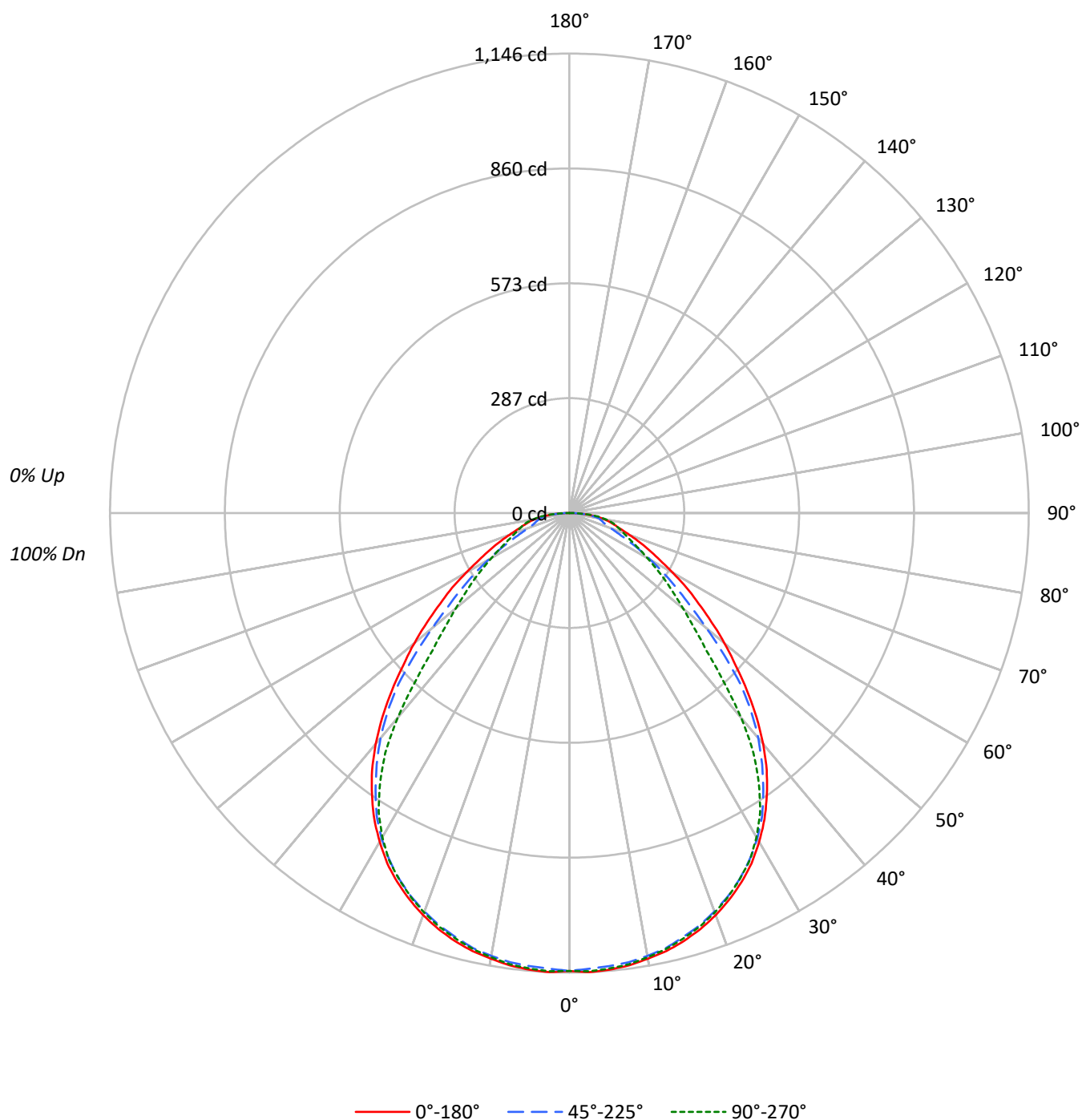
Input Watts (W): 22.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3073	3073	3073
5°	3088	3064	3080
10°	3084	3065	3073
15°	3078	3051	3060
20°	3056	3028	3036
25°	3016	2987	2988
30°	2942	2912	2899
35°	2822	2770	2708
40°	2641	2574	2342
45°	2385	2295	1831
50°	2115	1863	1548
55°	1847	1529	1366
60°	1601	1258	1206
65°	1404	1010	1113
70°	1253	856	1120
75°	1222	902	1252
80°	1354	1139	1435
85°	1411	1216	1680



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	4.3
10°-20°	310.4	12.5
20°-30°	464.3	18.6
30°-40°	524.1	21.0
40°-50°	444.6	17.8
50°-60°	300.8	12.1
60°-70°	179.6	7.2
70°-80°	112.5	4.5
80°-90°	47.3	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°	883.0	35.4
0°-40°	1407.2	56.5
0°-60°	2152.6	86.4
0°-90°	2492.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1142	1142	1142	1142	1142	
5°	1143	1140	1134	1142	1140	109
15°	1105	1103	1095	1103	1098	312
25°	1016	1012	1006	1011	1006	467
35°	859	853	843	836	824	535
45°	627	629	603	517	481	483
55°	394	375	326	292	291	355
65°	220	183	159	169	175	220
75°	118	105	87	115	120	126
85°	46	43	39	51	54	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1141.9	1141.9	1141.9	1141.9	1141.9
2.5°	1146.0	1142.5	1137.3	1144.3	1143.7
5°	1143.1	1139.6	1134.4	1142.5	1140.2
7.5°	1137.9	1135.0	1129.8	1137.3	1135.0
10°	1128.6	1126.3	1121.7	1128.1	1124.6
12.5°	1118.8	1117.1	1111.3	1117.1	1113.6
15°	1104.9	1102.6	1095.1	1102.6	1098.5
17.5°	1087.5	1084.6	1078.3	1084.6	1081.2
20°	1067.3	1063.8	1057.4	1063.8	1060.3
22.5°	1043.0	1040.1	1034.3	1040.1	1035.4
25°	1015.8	1012.3	1005.9	1010.6	1006.5
27.5°	984.5	979.9	974.1	977.6	975.3
30°	946.9	941.1	937.1	937.1	933.0
32.5°	905.8	901.7	894.8	890.8	885.5
35°	858.9	853.1	843.3	835.8	824.2
37.5°	808.6	801.6	789.5	770.4	754.7
40°	751.8	743.2	732.7	695.1	666.8
42.5°	691.1	689.3	671.4	607.1	567.8
45°	626.8	629.1	603.1	516.9	481.0
47.5°	562.0	570.1	522.6	438.1	419.6
50°	505.3	508.2	445.1	380.3	369.8
52.5°	446.8	442.2	379.7	334.5	327.0
55°	393.6	375.1	325.9	291.7	291.1
57.5°	346.7	312.5	278.4	252.9	255.8
60°	297.5	259.3	233.8	219.9	224.0
62.5°	254.1	217.6	195.1	191.0	197.9
65°	220.5	182.9	158.6	169.0	174.8
67.5°	188.7	156.9	129.1	154.0	156.3
70°	159.2	136.0	108.8	141.8	142.4
72.5°	134.9	120.4	94.3	128.5	130.2
75°	117.5	104.8	86.8	114.6	120.4
77.5°	103.0	89.7	80.5	99.0	108.8
80°	87.4	72.3	73.5	82.8	92.6
82.5°	67.1	56.1	58.5	68.3	75.2
85°	45.7	43.4	39.4	50.9	54.4
87.5°	24.3	23.2	20.3	28.9	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)