

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: P290612

Luminaire Tested: **14GR-LD5-28-F1-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290612
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-LD5-28-F1-UNV-L82765-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2814.0 lumens
Efficiency: N/A
Efficacy: 126.1 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

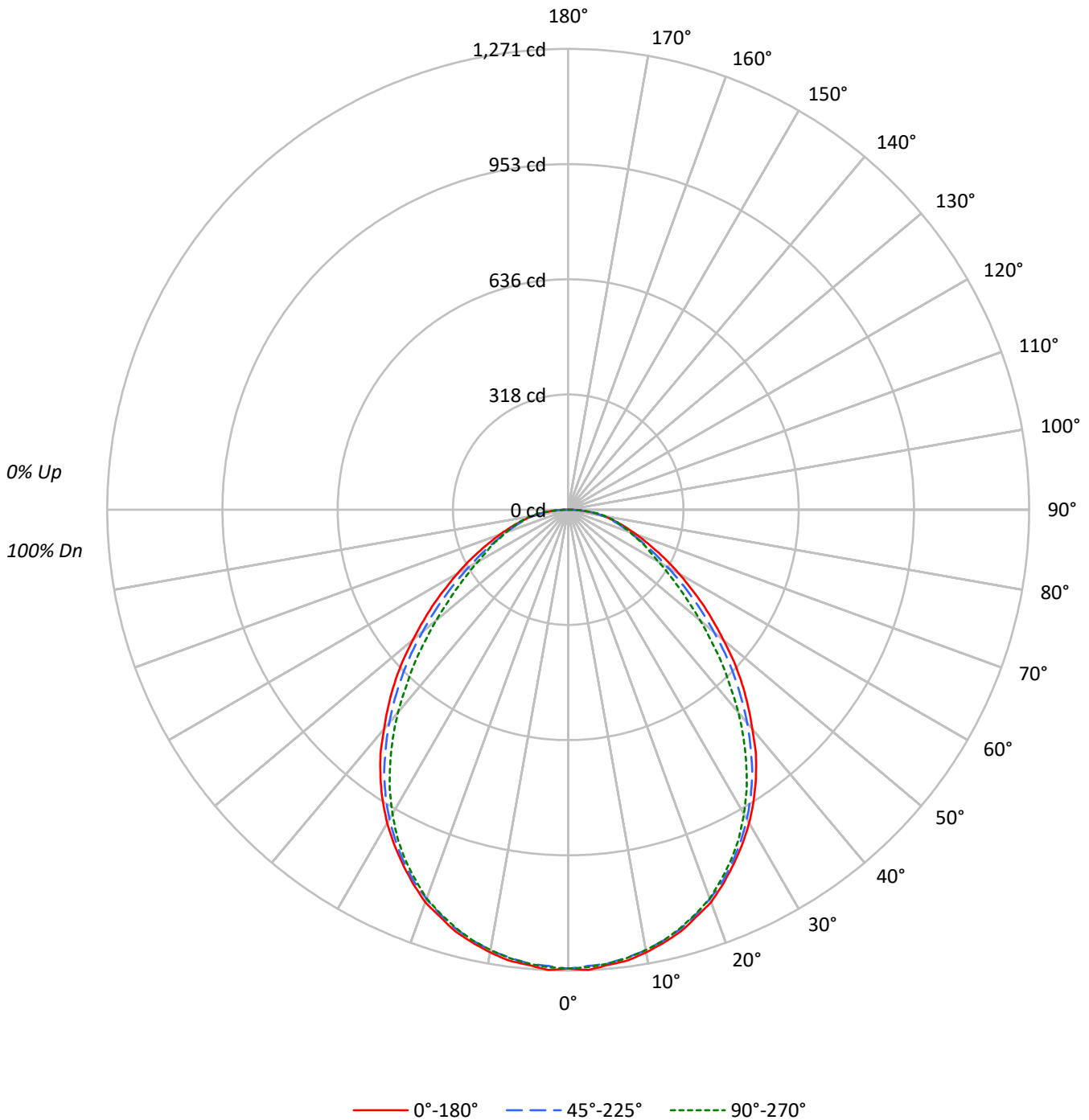
Input Watts (W): 22.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	3405	3405	3405
5°	3405	3393	3394
10°	3387	3372	3370
15°	3353	3333	3328
20°	3299	3271	3267
25°	3204	3183	3160
30°	3100	3063	3010
35°	2964	2907	2812
40°	2775	2699	2565
45°	2578	2462	2283
50°	2339	2193	1987
55°	2115	1937	1737
60°	1899	1697	1548
65°	1705	1515	1483
70°	1574	1411	1426
75°	1502	1415	1495
80°	1519	1509	1629
85°	1575	1553	1732



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	4.2
10°-20°	337.7	12.0
20°-30°	493.2	17.5
30°-40°	549.6	19.5
40°-50°	495.2	17.6
50°-60°	370.2	13.2
60°-70°	244.2	8.7
70°-80°	149.1	5.3
80°-90°	55.3	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°	950.5	33.8
0°-40°	1500.1	53.3
0°-60°	2365.4	84.1
0°-90°	2814.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2814.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1266	1266	1266	1266	1266	
5°	1260	1259	1256	1262	1256	120
15°	1204	1199	1196	1204	1195	339
25°	1079	1075	1072	1074	1064	497
35°	902	895	885	870	856	563
45°	677	670	647	617	600	521
55°	451	444	413	379	370	404
65°	268	259	238	228	233	268
75°	144	142	136	141	144	154
85°	51	49	50	56	56	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1265.5	1265.5	1265.5	1265.5	1265.5
2.5°	1270.7	1264.9	1259.7	1267.5	1262.9
5°	1260.4	1259.1	1255.9	1262.3	1256.5
7.5°	1253.9	1249.4	1245.5	1253.3	1246.8
10°	1239.7	1237.1	1233.9	1240.4	1233.3
12.5°	1222.3	1219.7	1216.5	1224.2	1216.5
15°	1203.6	1199.1	1196.5	1203.6	1194.6
17.5°	1176.5	1174.6	1170.7	1177.8	1168.8
20°	1152.0	1144.9	1142.3	1147.5	1141.0
22.5°	1116.5	1111.4	1110.7	1113.9	1103.0
25°	1079.1	1075.2	1072.0	1074.0	1064.3
27.5°	1039.8	1034.6	1030.7	1030.1	1019.8
30°	997.8	991.4	985.6	980.4	968.8
32.5°	952.0	944.3	936.6	928.2	915.9
35°	902.4	894.6	885.0	869.5	855.9
37.5°	850.1	841.1	825.6	807.6	794.0
40°	790.1	785.6	768.2	745.0	730.2
42.5°	734.0	728.9	706.9	681.1	661.1
45°	677.3	670.2	647.0	617.3	599.9
47.5°	619.2	612.1	586.3	549.6	534.1
50°	558.6	554.7	523.8	490.2	474.7
52.5°	503.1	498.6	467.0	433.5	419.3
55°	450.9	443.8	412.8	378.6	370.2
57.5°	398.6	390.9	361.9	332.8	327.0
60°	352.8	343.2	315.4	292.8	287.7
62.5°	309.6	298.6	275.4	258.0	255.4
65°	267.7	259.3	238.0	228.3	232.9
67.5°	231.6	223.2	207.7	203.8	202.5
70°	200.0	192.2	179.3	180.6	181.3
72.5°	170.9	166.4	156.7	160.0	162.5
75°	144.5	141.9	136.1	140.6	143.8
77.5°	120.6	118.7	116.1	120.0	125.1
80°	98.0	96.8	97.4	100.0	105.1
82.5°	75.5	72.9	74.8	80.0	83.2
85°	51.0	49.0	50.3	55.5	56.1
87.5°	23.9	23.9	23.2	27.1	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)