

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: P290616

Luminaire Tested: **14GR-LD5-28-F1-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290616
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-5500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2996.0 lumens
Efficiency: N/A
Efficacy: 131.0 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

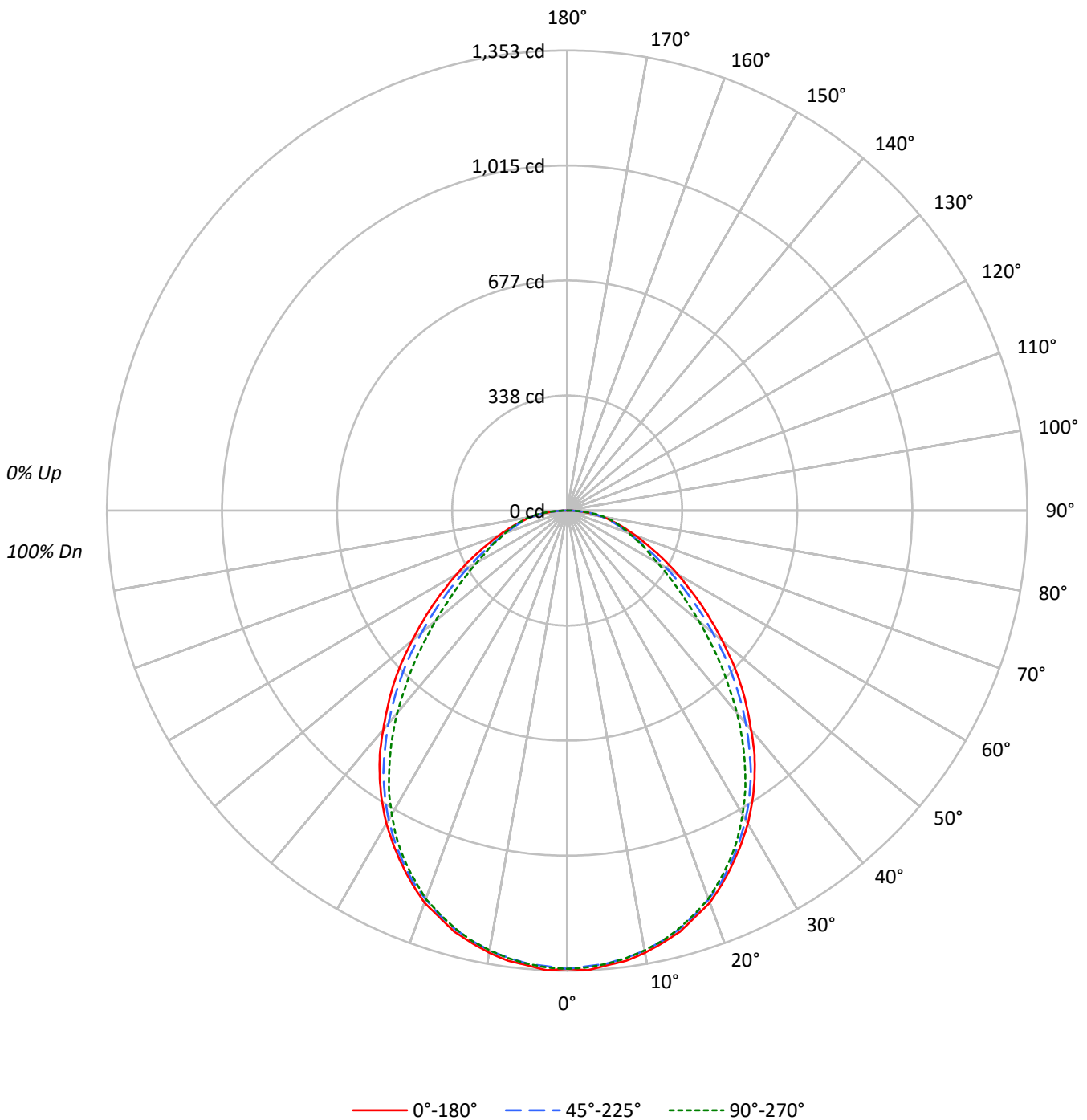
Input Watts (W): 22.878
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3626	3626	3626
5°	3625	3612	3614
10°	3607	3590	3588
15°	3570	3549	3543
20°	3512	3483	3479
25°	3411	3389	3364
30°	3301	3260	3205
35°	3156	3095	2994
40°	2955	2873	2731
45°	2744	2621	2431
50°	2490	2334	2116
55°	2252	2062	1849
60°	2021	1807	1648
65°	1815	1613	1578
70°	1675	1502	1519
75°	1599	1507	1592
80°	1618	1607	1734
85°	1677	1655	1843



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	4.2
10°-20°	359.6	12.0
20°-30°	525.1	17.5
30°-40°	585.2	19.5
40°-50°	527.2	17.6
50°-60°	394.1	13.2
60°-70°	260.0	8.7
70°-80°	158.7	5.3
80°-90°	58.9	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°	1011.9	33.8
0°-40°	1597.1	53.3
0°-60°	2518.4	84.1
0°-90°	2996.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2996.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1347	1347	1347	1347	1347	
5°	1342	1340	1337	1344	1338	128
15°	1282	1277	1274	1282	1272	361
25°	1149	1145	1141	1143	1133	529
35°	961	952	942	926	911	599
45°	721	714	689	657	639	555
55°	480	472	440	403	394	430
65°	285	276	253	243	248	286
75°	154	151	145	150	153	164
85°	54	52	54	59	60	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1347.4	1347.4	1347.4	1347.4	1347.4
2.5°	1352.9	1346.7	1341.2	1349.4	1344.6
5°	1341.9	1340.5	1337.1	1343.9	1337.8
7.5°	1335.0	1330.2	1326.1	1334.3	1327.5
10°	1319.9	1317.2	1313.7	1320.6	1313.0
12.5°	1301.4	1298.6	1295.2	1303.4	1295.2
15°	1281.5	1276.6	1273.9	1281.5	1271.8
17.5°	1252.6	1250.5	1246.4	1254.0	1244.4
20°	1226.5	1219.0	1216.2	1221.7	1214.8
22.5°	1188.7	1183.2	1182.6	1186.0	1174.3
25°	1148.9	1144.8	1141.4	1143.4	1133.1
27.5°	1107.0	1101.5	1097.4	1096.7	1085.7
30°	1062.4	1055.5	1049.3	1043.8	1031.5
32.5°	1013.6	1005.4	997.1	988.2	975.2
35°	960.7	952.5	942.2	925.7	911.3
37.5°	905.1	895.5	879.0	859.8	845.4
40°	841.3	836.4	817.9	793.2	777.4
42.5°	781.5	776.0	752.7	725.2	703.9
45°	721.1	713.5	688.8	657.2	638.7
47.5°	659.3	651.7	624.2	585.1	568.6
50°	594.7	590.6	557.6	521.9	505.4
52.5°	535.7	530.8	497.2	461.5	446.4
55°	480.0	472.5	439.5	403.1	394.2
57.5°	424.4	416.2	385.3	354.4	348.2
60°	375.6	365.3	335.8	311.8	306.3
62.5°	329.6	318.0	293.2	274.7	271.9
65°	285.0	276.1	253.4	243.1	247.9
67.5°	246.5	237.6	221.1	217.0	215.6
70°	212.9	204.6	190.9	192.3	193.0
72.5°	182.0	177.2	166.9	170.3	173.1
75°	153.8	151.1	144.9	149.7	153.1
77.5°	128.4	126.4	123.6	127.7	133.2
80°	104.4	103.0	103.7	106.4	111.9
82.5°	80.3	77.6	79.7	85.2	88.6
85°	54.3	52.2	53.6	59.1	59.7
87.5°	25.4	25.4	24.7	28.8	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)