

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: P292138

Luminaire Tested: **22GR-LD5-28-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-A-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3084.0 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

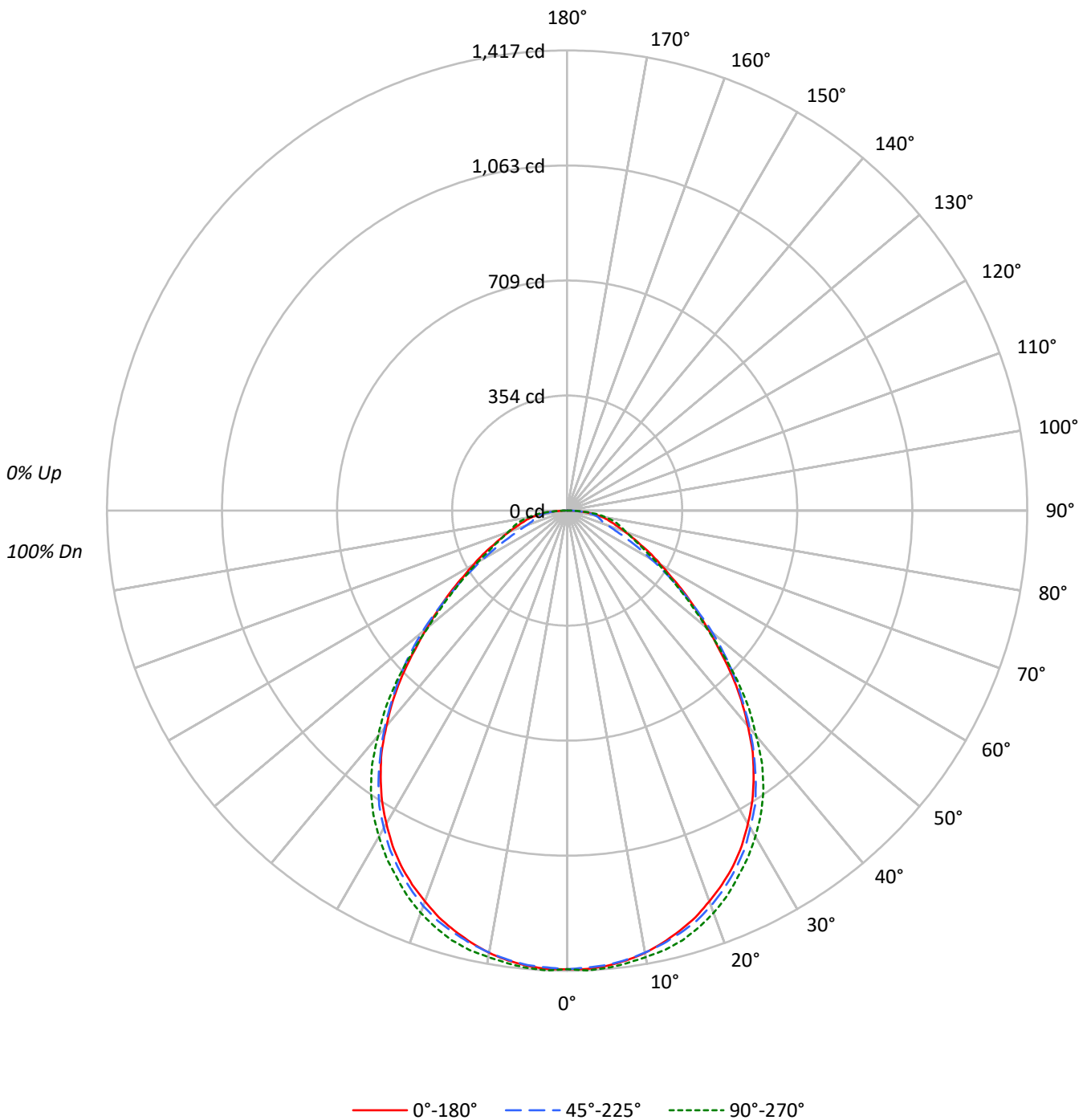
Input Watts (W): 23.157
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86					86			
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74					74			
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64					64			
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56					56			
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49					49			
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44					44			
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39					39			
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36					36			
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32					32			
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3801	3801	3801
5°	3801	3796	3819
10°	3779	3777	3814
15°	3731	3751	3817
20°	3666	3710	3775
25°	3588	3629	3695
30°	3459	3506	3601
35°	3289	3326	3461
40°	3040	3073	3182
45°	2731	2780	2824
50°	2362	2446	2337
55°	2061	2007	1980
60°	1785	1607	1715
65°	1595	1261	1540
70°	1479	1045	1519
75°	1477	1104	1686
80°	1635	1390	1901
85°	1707	1507	2149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	4.3
10°-20°	380.7	12.3
20°-30°	563.0	18.3
30°-40°	635.3	20.6
40°-50°	560.0	18.2
50°-60°	384.2	12.5
60°-70°	226.7	7.4
70°-80°	141.5	4.6
80°-90°	59.0	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°	1077.3	34.9
0°-40°	1712.6	55.5
0°-60°	2656.8	86.1
0°-90°	3084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1412	1412	1412	1412	1412	
5°	1407	1404	1405	1410	1414	134
15°	1339	1341	1346	1363	1370	377
25°	1208	1213	1222	1238	1244	555
35°	1001	1010	1013	1037	1054	624
45°	718	721	731	735	742	551
55°	439	428	428	413	422	394
65°	250	220	198	229	242	252
75°	142	128	106	149	162	152
85°	55	52	49	64	70	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1412.4	1412.4	1412.4	1412.4	1412.4
2.5°	1413.1	1409.5	1408.1	1413.8	1417.4
5°	1407.3	1404.5	1405.2	1410.2	1413.8
7.5°	1397.3	1395.1	1395.1	1402.3	1405.9
10°	1382.9	1382.2	1382.2	1390.8	1395.9
12.5°	1362.8	1363.6	1366.4	1377.9	1386.5
15°	1339.2	1340.6	1346.3	1362.8	1370.0
17.5°	1313.3	1313.3	1324.8	1337.7	1346.3
20°	1280.3	1282.5	1295.4	1309.7	1318.3
22.5°	1246.6	1250.2	1260.9	1277.4	1285.3
25°	1208.5	1212.9	1222.2	1238.0	1244.4
27.5°	1164.0	1169.8	1179.8	1191.3	1205.0
30°	1113.1	1121.7	1128.2	1144.0	1159.0
32.5°	1061.4	1069.3	1076.5	1093.0	1110.2
35°	1001.1	1009.8	1012.6	1037.0	1053.5
37.5°	939.4	943.0	944.4	968.8	986.8
40°	865.5	872.7	874.8	894.2	905.7
42.5°	794.5	797.3	801.6	816.0	829.6
45°	717.7	721.3	730.6	734.9	742.1
47.5°	637.3	648.0	658.8	645.2	645.9
50°	564.1	572.7	584.2	558.3	558.3
52.5°	498.8	503.1	503.8	482.3	486.6
55°	439.2	428.4	427.7	413.4	422.0
57.5°	379.6	365.3	360.3	356.0	366.0
60°	331.6	305.7	298.5	305.0	318.6
62.5°	292.1	259.1	245.4	261.9	274.1
65°	250.5	220.3	198.1	228.9	241.9
67.5°	218.2	189.5	160.8	204.5	213.9
70°	188.0	165.8	132.8	185.9	193.1
72.5°	163.6	146.4	114.8	167.9	176.5
75°	142.1	127.7	106.2	148.6	162.2
77.5°	124.9	109.1	99.0	128.5	145.0
80°	105.5	89.7	89.7	107.6	122.7
82.5°	83.2	70.3	72.5	87.6	98.3
85°	55.3	51.7	48.8	63.9	69.6
87.5°	28.0	28.7	25.8	33.0	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)