

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: P292671

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-A19/156-UNV-L92765-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2538.0 lumens
Efficiency: N/A
Efficacy: 113.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

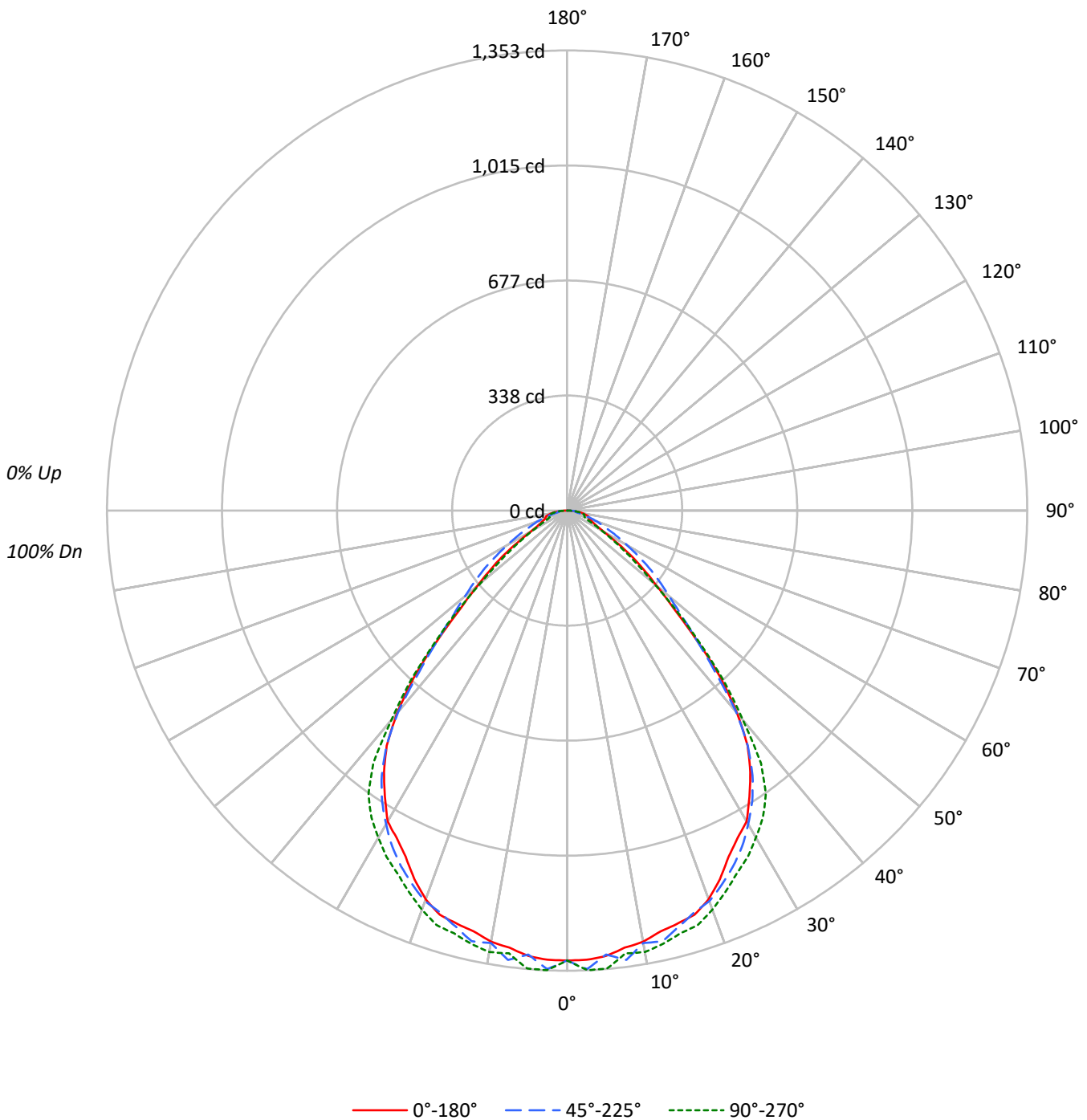
Input Watts (W): 22.32
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88					88			
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77					77			
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68					68			
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60					60			
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54					54			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48					48			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44					44			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40					40			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3559	3559	3559
5°	3551	3539	3650
10°	3518	3528	3601
15°	3502	3528	3585
20°	3483	3500	3576
25°	3334	3428	3499
30°	3279	3309	3451
35°	3084	3123	3346
40°	2733	2714	2821
45°	2041	2046	2103
50°	1437	1635	1392
55°	1060	1380	951
60°	663	1091	621
65°	541	864	434
70°	537	720	428
75°	665	528	553
80°	741	417	677
85°	738	775	756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.9	5.0
10°-20°	358.7	14.1
20°-30°	531.2	20.9
30°-40°	595.0	23.4
40°-50°	437.2	17.2
50°-60°	244.4	9.6
60°-70°	136.2	5.4
70°-80°	80.0	3.2
80°-90°	29.4	1.2
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°	1015.8	40.0
0°-40°	1610.8	63.5
0°-60°	2292.3	90.3
0°-90°	2538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2538.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1314	1339	1310	1337	1351	124
15°	1257	1265	1266	1286	1287	355
25°	1123	1132	1155	1171	1179	520
35°	939	939	951	994	1018	582
45°	536	580	538	576	552	419
55°	226	275	294	294	203	202
65°	85	151	136	174	68	88
75°	64	90	51	102	53	64
85°	24	35	25	32	24	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1322.7	1322.7	1322.7	1322.7	1322.7
2.5°	1322.1	1334.1	1349.6	1351.4	1352.6
5°	1314.4	1338.9	1310.2	1337.1	1351.4
7.5°	1296.4	1311.4	1332.3	1305.4	1313.2
10°	1287.5	1291.0	1291.0	1324.5	1318.0
12.5°	1267.1	1291.0	1297.0	1290.4	1304.8
15°	1257.0	1264.7	1266.5	1285.7	1286.9
17.5°	1245.6	1243.8	1239.6	1253.4	1277.9
20°	1216.3	1209.7	1222.3	1239.0	1248.6
22.5°	1173.2	1175.0	1190.0	1203.7	1214.5
25°	1123.0	1132.0	1154.7	1170.8	1178.6
27.5°	1085.3	1098.5	1114.0	1133.2	1148.7
30°	1055.4	1054.2	1065.0	1092.5	1110.5
32.5°	997.4	1001.6	1013.0	1045.9	1071.0
35°	938.8	939.4	950.8	993.8	1018.4
37.5°	871.3	866.5	873.1	919.7	935.8
40°	778.0	779.2	772.6	805.5	803.1
42.5°	669.1	678.7	644.6	687.7	684.7
45°	536.4	580.0	537.6	575.9	552.5
47.5°	423.4	488.0	452.7	480.8	437.1
50°	343.2	409.6	390.5	403.0	332.5
52.5°	281.6	335.5	341.4	344.4	259.5
55°	226.0	275.1	294.2	293.6	202.7
57.5°	166.8	223.6	245.8	254.7	153.7
60°	123.2	186.0	202.7	222.4	115.4
62.5°	99.3	163.2	167.4	194.9	87.9
65°	84.9	150.7	135.7	174.0	68.2
67.5°	75.3	140.5	110.6	155.5	58.0
70°	68.2	125.0	91.5	139.3	54.4
72.5°	66.4	106.4	70.6	124.4	53.8
75°	64.0	90.3	50.8	102.3	53.2
77.5°	55.0	77.1	36.5	78.9	49.6
80°	47.8	61.6	26.9	59.2	43.7
82.5°	37.1	46.6	23.9	44.8	35.3
85°	23.9	35.3	25.1	32.3	24.5
87.5°	11.4	19.7	17.9	17.3	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)