

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: P292672

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292672
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-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2603.0 lumens
Efficiency: N/A
Efficacy: 116.1 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

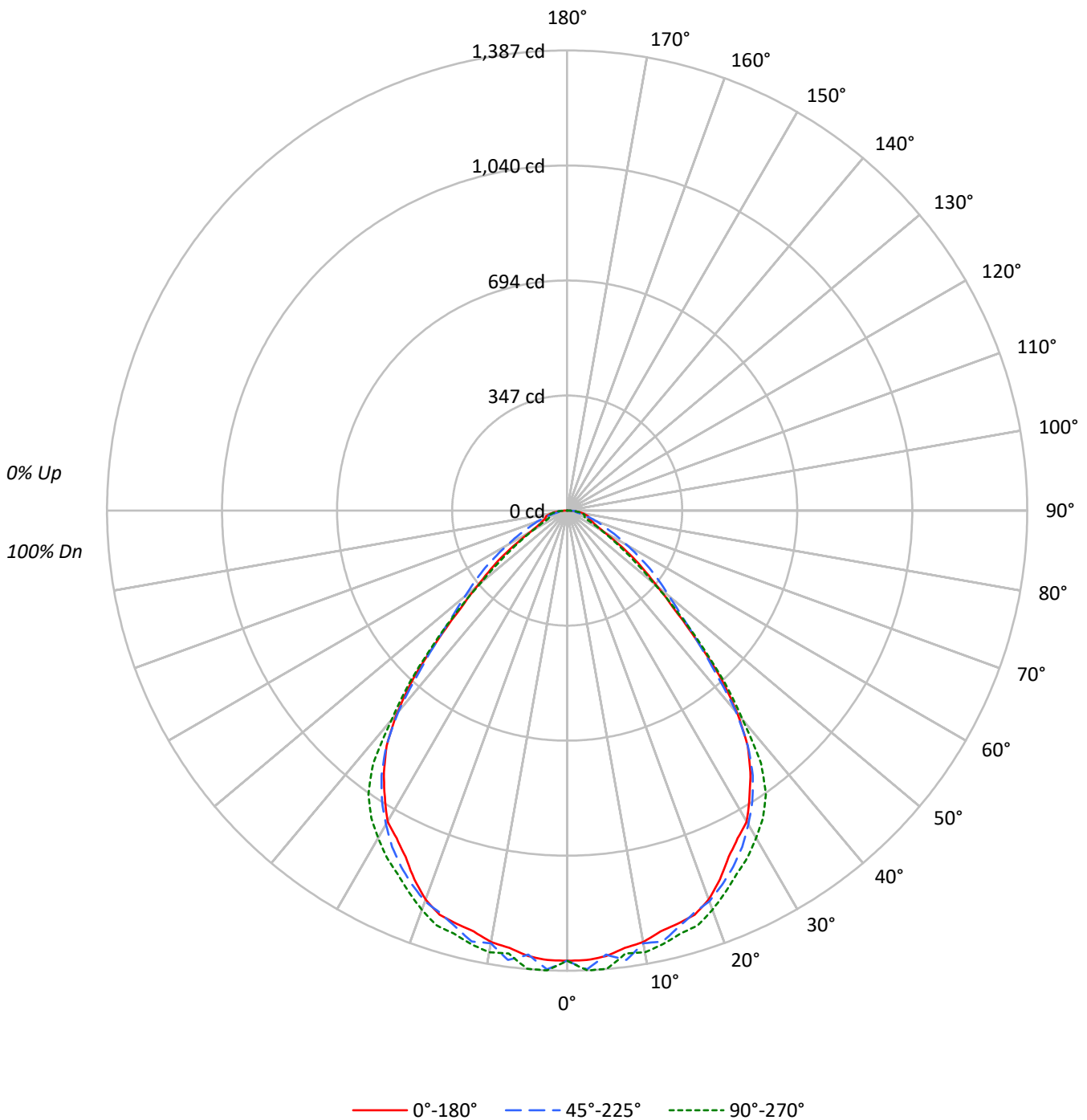
Input Watts (W): 22.413
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3651	3651	3651
5°	3641	3630	3744
10°	3608	3618	3694
15°	3591	3619	3677
20°	3572	3590	3667
25°	3420	3516	3589
30°	3364	3394	3539
35°	3163	3203	3431
40°	2803	2784	2894
45°	2093	2098	2157
50°	1474	1677	1428
55°	1088	1415	975
60°	680	1119	637
65°	555	886	445
70°	550	738	439
75°	682	542	568
80°	761	428	694
85°	756	797	775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	5.0
10°-20°	367.8	14.1
20°-30°	544.8	20.9
30°-40°	610.2	23.4
40°-50°	448.4	17.2
50°-60°	250.6	9.6
60°-70°	139.7	5.4
70°-80°	82.1	3.2
80°-90°	30.2	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°	1041.8	40.0
0°-40°	1652.0	63.5
0°-60°	2351.1	90.3
0°-90°	2603.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2603.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1357	1357	1357	1357	1357	
5°	1348	1373	1344	1371	1386	128
15°	1289	1297	1299	1319	1320	364
25°	1152	1161	1184	1201	1209	534
35°	963	964	975	1019	1044	597
45°	550	595	551	591	567	430
55°	232	282	302	301	208	207
65°	87	155	139	178	70	90
75°	66	93	52	105	55	66
85°	24	36	26	33	25	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1356.6	1356.6	1356.6	1356.6	1356.6
2.5°	1356.0	1368.3	1384.2	1386.0	1387.3
5°	1348.0	1373.2	1343.7	1371.3	1386.0
7.5°	1329.6	1345.0	1366.4	1338.8	1346.8
10°	1320.4	1324.1	1324.1	1358.5	1351.7
12.5°	1299.6	1324.1	1330.2	1323.5	1338.2
15°	1289.1	1297.1	1299.0	1318.6	1319.8
17.5°	1277.5	1275.7	1271.4	1285.5	1310.6
20°	1247.4	1240.7	1253.6	1270.7	1280.6
22.5°	1203.3	1205.1	1220.5	1234.6	1245.6
25°	1151.8	1161.0	1184.3	1200.8	1208.8
27.5°	1113.1	1126.6	1142.6	1162.2	1178.1
30°	1082.5	1081.2	1092.3	1120.5	1138.9
32.5°	1023.0	1027.3	1038.9	1072.7	1098.4
35°	962.9	963.5	975.1	1019.3	1044.4
37.5°	893.6	888.7	895.4	943.2	959.8
40°	797.9	799.1	792.4	826.1	823.7
42.5°	686.3	696.1	661.1	705.3	702.2
45°	550.1	594.9	551.4	590.6	566.7
47.5°	434.2	500.4	464.3	493.1	448.3
50°	352.0	420.1	400.5	413.4	341.0
52.5°	288.9	344.1	350.2	353.3	266.2
55°	231.8	282.1	301.7	301.1	207.9
57.5°	171.1	229.4	252.1	261.3	157.6
60°	126.3	190.7	207.9	228.1	118.4
62.5°	101.8	167.4	171.7	199.9	90.2
65°	87.1	154.6	139.2	178.5	69.9
67.5°	77.3	144.1	113.5	159.5	59.5
70°	69.9	128.2	93.8	142.9	55.8
72.5°	68.1	109.2	72.4	127.6	55.2
75°	65.6	92.6	52.1	104.9	54.6
77.5°	56.4	79.1	37.4	81.0	50.9
80°	49.1	63.2	27.6	60.7	44.8
82.5°	38.0	47.8	24.5	46.0	36.2
85°	24.5	36.2	25.8	33.1	25.1
87.5°	11.7	20.2	18.4	17.8	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)