

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: P292572

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292572
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-L82765-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2806.0 lumens
Efficiency: N/A
Efficacy: 126.8 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

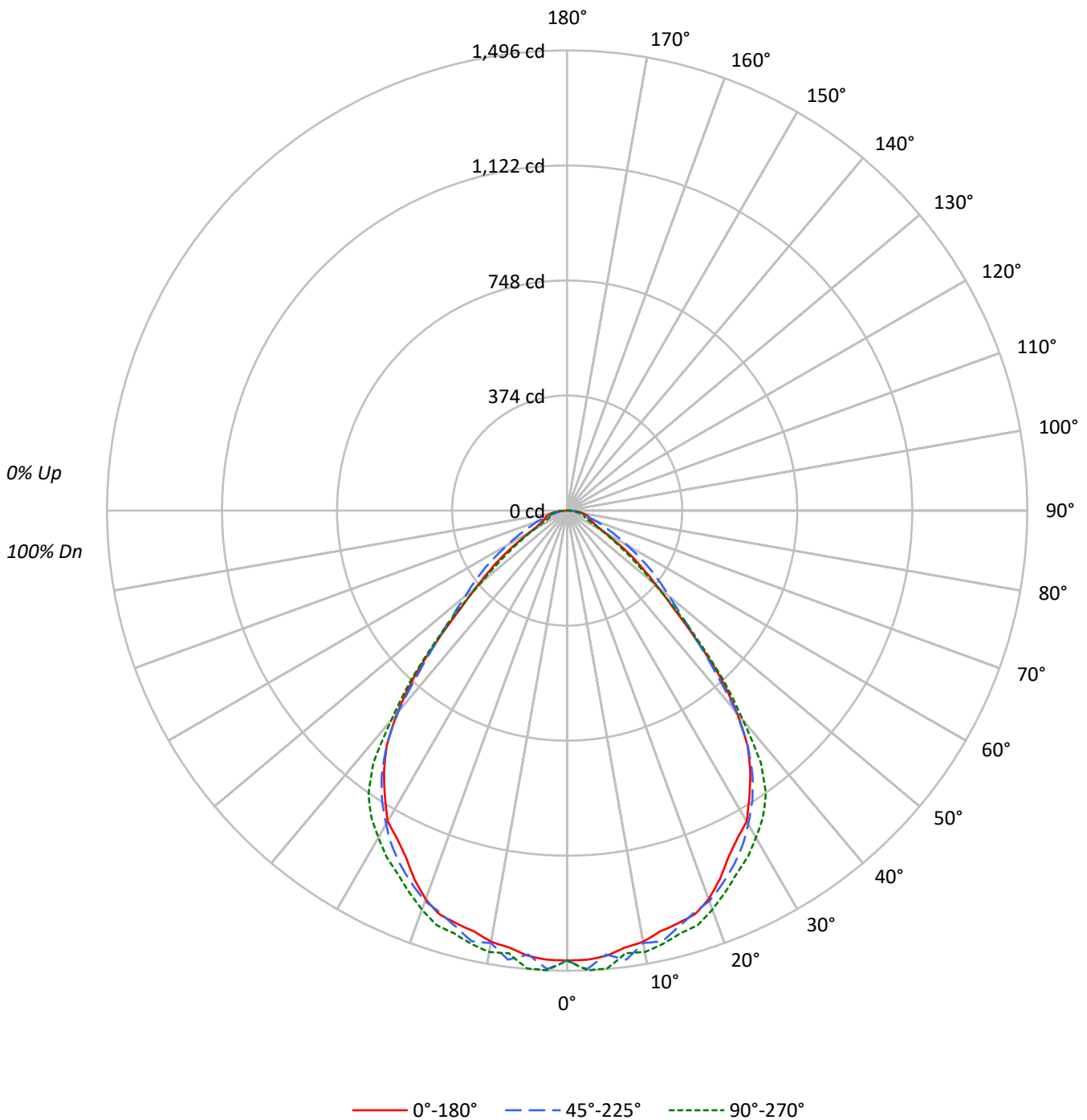
Input Watts (W): 22.134
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3935	3935	3935
5°	3925	3913	4036
10°	3889	3900	3982
15°	3872	3901	3964
20°	3851	3870	3953
25°	3687	3790	3869
30°	3626	3659	3815
35°	3410	3453	3699
40°	3021	3001	3119
45°	2257	2262	2325
50°	1589	1807	1539
55°	1172	1526	1051
60°	733	1206	687
65°	598	956	480
70°	593	796	474
75°	735	584	611
80°	820	462	748
85°	815	858	837



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.2	5.0
10°-20°	396.5	14.1
20°-30°	587.3	20.9
30°-40°	657.8	23.4
40°-50°	483.4	17.2
50°-60°	270.2	9.6
60°-70°	150.6	5.4
70°-80°	88.5	3.2
80°-90°	32.5	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°	1123.0	40.0
0°-40°	1780.9	63.5
0°-60°	2534.4	90.3
0°-90°	2806.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2806.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1453	1480	1448	1478	1494	138
15°	1390	1398	1400	1421	1423	392
25°	1242	1252	1277	1294	1303	575
35°	1038	1039	1051	1099	1126	643
45°	593	641	594	637	611	463
55°	250	304	325	325	224	223
65°	94	167	150	192	75	97
75°	71	100	56	113	59	71
85°	26	39	28	36	27	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1462.4	1462.4	1462.4	1462.4	1462.4
2.5°	1461.7	1475.0	1492.2	1494.1	1495.5
5°	1453.2	1480.3	1448.5	1478.3	1494.1
7.5°	1433.3	1449.8	1473.0	1443.2	1451.8
10°	1423.4	1427.4	1427.4	1464.4	1457.1
12.5°	1400.9	1427.4	1434.0	1426.7	1442.6
15°	1389.7	1398.3	1400.3	1421.4	1422.7
17.5°	1377.1	1375.1	1370.5	1385.7	1412.8
20°	1344.7	1337.5	1351.3	1369.9	1380.4
22.5°	1297.1	1299.1	1315.6	1330.8	1342.7
25°	1241.6	1251.5	1276.6	1294.5	1303.1
27.5°	1199.9	1214.5	1231.7	1252.8	1270.0
30°	1166.9	1165.6	1177.5	1207.9	1227.7
32.5°	1102.8	1107.4	1119.9	1156.3	1184.1
35°	1038.0	1038.6	1051.2	1098.8	1125.9
37.5°	963.3	958.0	965.2	1016.8	1034.7
40°	860.1	861.4	854.2	890.5	887.9
42.5°	739.8	750.4	712.7	760.3	757.0
45°	593.0	641.3	594.4	636.7	610.9
47.5°	468.1	539.5	500.5	531.5	483.3
50°	379.5	452.9	431.7	445.6	367.6
52.5°	311.4	370.9	377.5	380.8	286.9
55°	249.9	304.1	325.3	324.6	224.1
57.5°	184.5	247.3	271.7	281.6	169.9
60°	136.2	205.6	224.1	245.9	127.6
62.5°	109.7	180.5	185.1	215.5	97.2
65°	93.9	166.6	150.1	192.4	75.4
67.5°	83.3	155.4	122.3	171.9	64.1
70°	75.4	138.2	101.2	154.0	60.2
72.5°	73.4	117.7	78.0	137.5	59.5
75°	70.7	99.8	56.2	113.1	58.8
77.5°	60.8	85.3	40.3	87.3	54.9
80°	52.9	68.1	29.8	65.5	48.3
82.5°	41.0	51.6	26.4	49.6	39.0
85°	26.4	39.0	27.8	35.7	27.1
87.5°	12.6	21.8	19.8	19.2	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)