

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: P292635

Luminaire Tested: **22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292635
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-LD5-36-A19/156-UNV-L93050-W2A1-U-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2772.0 lumens
Efficiency: N/A
Efficacy: 96.5 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

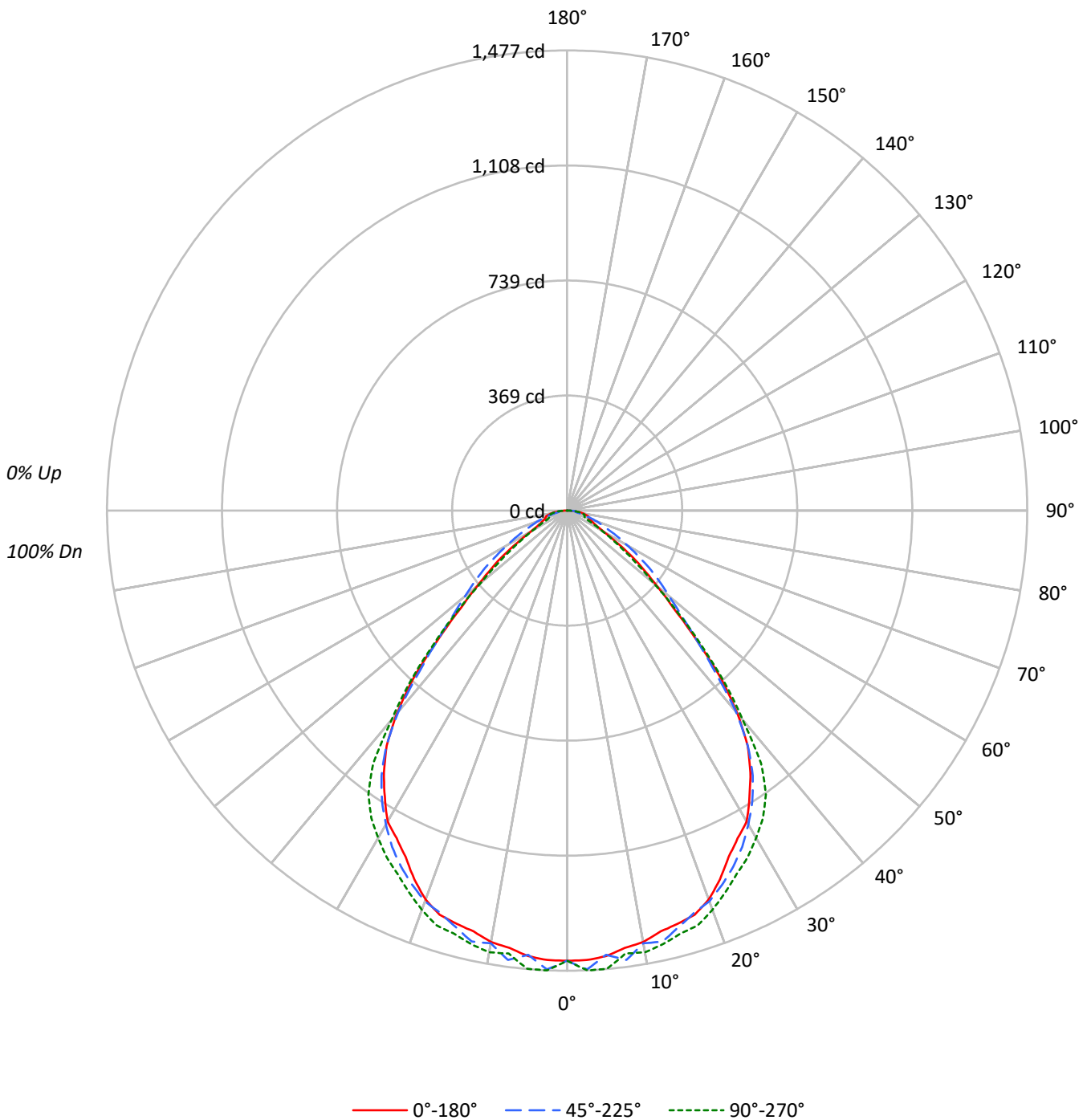
Input Watts (W): 28.737
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P292635

CATALOG NUMBER: 22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P292635

CATALOG NUMBER: 22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-3000K

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°	3888	3888	3888
5°	3878	3866	3987
10°	3842	3853	3933
15°	3824	3854	3916
20°	3804	3823	3905
25°	3642	3745	3822
30°	3582	3614	3769
35°	3369	3412	3654
40°	2985	2964	3081
45°	2229	2234	2297
50°	1569	1786	1520
55°	1158	1507	1039
60°	724	1192	679
65°	590	944	474
70°	586	786	467
75°	727	577	604
80°	809	456	739
85°	806	846	827



TEST NUMBER: P292635

CATALOG NUMBER: 22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.5	5.0
10°-20°	391.7	14.1
20°-30°	580.2	20.9
30°-40°	649.9	23.4
40°-50°	477.5	17.2
50°-60°	266.9	9.6
60°-70°	148.8	5.4
70°-80°	87.4	3.2
80°-90°	32.1	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°	1109.4	40.0
0°-40°	1759.3	63.5
0°-60°	2503.7	90.3
0°-90°	2772.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2772.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1436	1462	1431	1460	1476	136
15°	1373	1381	1383	1404	1406	388
25°	1226	1236	1261	1279	1287	568
35°	1025	1026	1038	1086	1112	635
45°	586	634	587	629	604	458
55°	247	300	321	321	221	220
65°	93	165	148	190	74	96
75°	70	99	56	112	58	70
85°	26	38	27	35	27	29
90°	0	0	0	0	0	



TEST NUMBER: P292635

CATALOG NUMBER: 22GR-LD5-36-A19/156-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.7	1444.7	1444.7	1444.7	1444.7
2.5°	1444.0	1457.1	1474.1	1476.0	1477.3
5°	1435.5	1462.3	1431.0	1460.4	1476.0
7.5°	1416.0	1432.3	1455.1	1425.7	1434.2
10°	1406.2	1410.1	1410.1	1446.6	1439.5
12.5°	1383.9	1410.1	1416.6	1409.4	1425.1
15°	1372.8	1381.3	1383.3	1404.2	1405.5
17.5°	1360.4	1358.5	1353.9	1368.9	1395.7
20°	1328.4	1321.3	1335.0	1353.3	1363.7
22.5°	1281.4	1283.4	1299.7	1314.7	1326.5
25°	1226.5	1236.3	1261.2	1278.8	1287.3
27.5°	1185.4	1199.8	1216.8	1237.7	1254.6
30°	1152.7	1151.4	1163.2	1193.2	1212.8
32.5°	1089.4	1094.0	1106.4	1142.3	1169.7
35°	1025.4	1026.0	1038.5	1085.5	1112.3
37.5°	951.6	946.4	953.5	1004.5	1022.1
40°	849.7	851.0	843.8	879.7	877.1
42.5°	730.8	741.3	704.1	751.1	747.8
45°	585.8	633.5	587.1	628.9	603.5
47.5°	462.4	532.9	494.4	525.1	477.4
50°	374.9	447.4	426.5	440.2	363.1
52.5°	307.6	366.4	372.9	376.2	283.5
55°	246.9	300.4	321.3	320.7	221.4
57.5°	182.2	244.3	268.4	278.2	167.9
60°	134.5	203.1	221.4	243.0	126.1
62.5°	108.4	178.3	182.9	212.9	96.0
65°	92.7	164.6	148.3	190.1	74.5
67.5°	82.3	153.5	120.8	169.8	63.4
70°	74.5	136.5	99.9	152.2	59.4
72.5°	72.5	116.3	77.1	135.8	58.8
75°	69.9	98.6	55.5	111.7	58.1
77.5°	60.1	84.3	39.8	86.2	54.2
80°	52.2	67.3	29.4	64.7	47.7
82.5°	40.5	50.9	26.1	49.0	38.5
85°	26.1	38.5	27.4	35.3	26.8
87.5°	12.4	21.6	19.6	18.9	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)