

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: P292669

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292669
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-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: 2341.0 lumens
Efficiency: N/A
Efficacy: 107.1 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

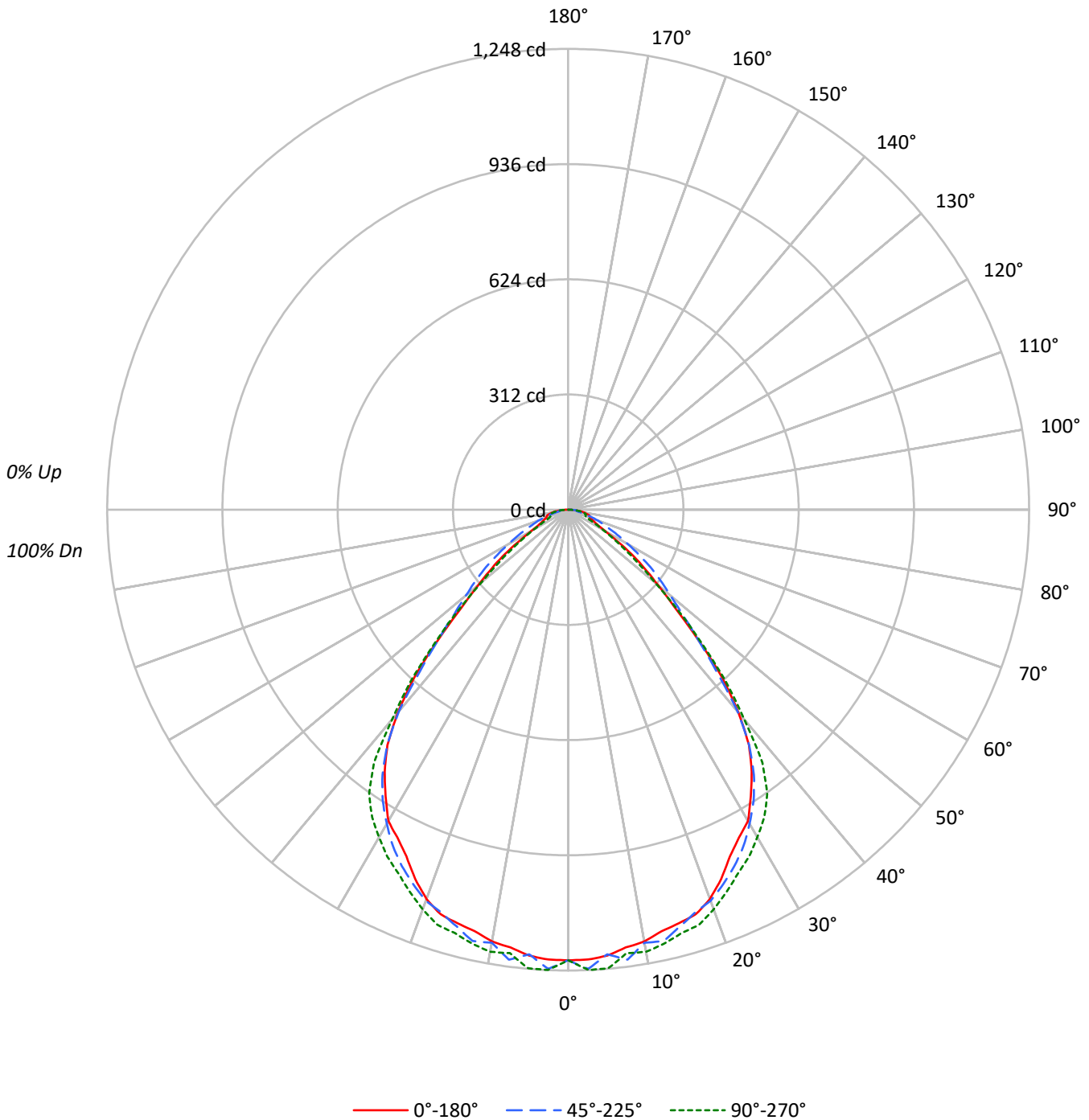
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3283	3283	3283
5°	3275	3264	3367
10°	3245	3254	3322
15°	3230	3254	3307
20°	3213	3229	3298
25°	3075	3162	3228
30°	3025	3052	3183
35°	2845	2881	3086
40°	2521	2503	2602
45°	1883	1887	1939
50°	1325	1508	1284
55°	978	1273	877
60°	611	1006	573
65°	499	797	401
70°	495	664	395
75°	613	488	510
80°	683	384	625
85°	682	716	698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	5.0
10°-20°	330.8	14.1
20°-30°	490.0	20.9
30°-40°	548.8	23.4
40°-50°	403.3	17.2
50°-60°	225.4	9.6
60°-70°	125.6	5.4
70°-80°	73.8	3.2
80°-90°	27.1	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°	936.9	40.0
0°-40°	1485.7	63.5
0°-60°	2114.4	90.3
0°-90°	2341.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2341.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1220	1220	1220	1220	1220	
5°	1212	1235	1208	1233	1246	115
15°	1159	1167	1168	1186	1187	327
25°	1036	1044	1065	1080	1087	480
35°	866	866	877	917	939	536
45°	495	535	496	531	510	387
55°	208	254	271	271	187	186
65°	78	139	125	160	63	81
75°	59	83	47	94	49	59
85°	22	32	23	30	23	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1220.1	1220.1	1220.1	1220.1	1220.1
2.5°	1219.5	1230.5	1244.9	1246.5	1247.6
5°	1212.3	1235.0	1208.5	1233.3	1246.5
7.5°	1195.8	1209.6	1228.9	1204.1	1211.2
10°	1187.5	1190.8	1190.8	1221.7	1215.7
12.5°	1168.8	1190.8	1196.3	1190.3	1203.5
15°	1159.4	1166.6	1168.2	1185.9	1187.0
17.5°	1148.9	1147.3	1143.4	1156.1	1178.7
20°	1121.9	1115.8	1127.4	1142.8	1151.7
22.5°	1082.2	1083.8	1097.6	1110.3	1120.2
25°	1035.8	1044.1	1065.1	1080.0	1087.1
27.5°	1001.1	1013.2	1027.6	1045.2	1059.6
30°	973.5	972.4	982.3	1007.7	1024.3
32.5°	920.0	923.9	934.4	964.7	987.9
35°	866.0	866.5	877.0	916.7	939.3
37.5°	803.6	799.2	805.3	848.3	863.2
40°	717.6	718.7	712.6	743.0	740.8
42.5°	617.2	626.0	594.6	634.3	631.5
45°	494.8	535.0	495.9	531.2	509.6
47.5°	390.5	450.1	417.5	443.5	403.2
50°	316.6	377.8	360.2	371.8	306.7
52.5°	259.8	309.4	314.9	317.7	239.4
55°	208.5	253.7	271.4	270.8	187.0
57.5°	153.9	206.3	226.7	235.0	141.8
60°	113.6	171.5	187.0	205.2	106.5
62.5°	91.6	150.6	154.4	179.8	81.1
65°	78.3	139.0	125.2	160.5	62.9
67.5°	69.5	129.6	102.0	143.4	53.5
70°	62.9	115.3	84.4	128.5	50.2
72.5°	61.2	98.2	65.1	114.7	49.6
75°	59.0	83.3	46.9	94.3	49.1
77.5°	50.7	71.2	33.6	72.8	45.8
80°	44.1	56.8	24.8	54.6	40.3
82.5°	34.2	43.0	22.1	41.4	32.5
85°	22.1	32.5	23.2	29.8	22.6
87.5°	10.5	18.2	16.5	16.0	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)