

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: P292571

Luminaire Tested: **22GR-LD5-28-A19/156-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292571
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-3000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2713.0 lumens
Efficiency: N/A
Efficacy: 124.1 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

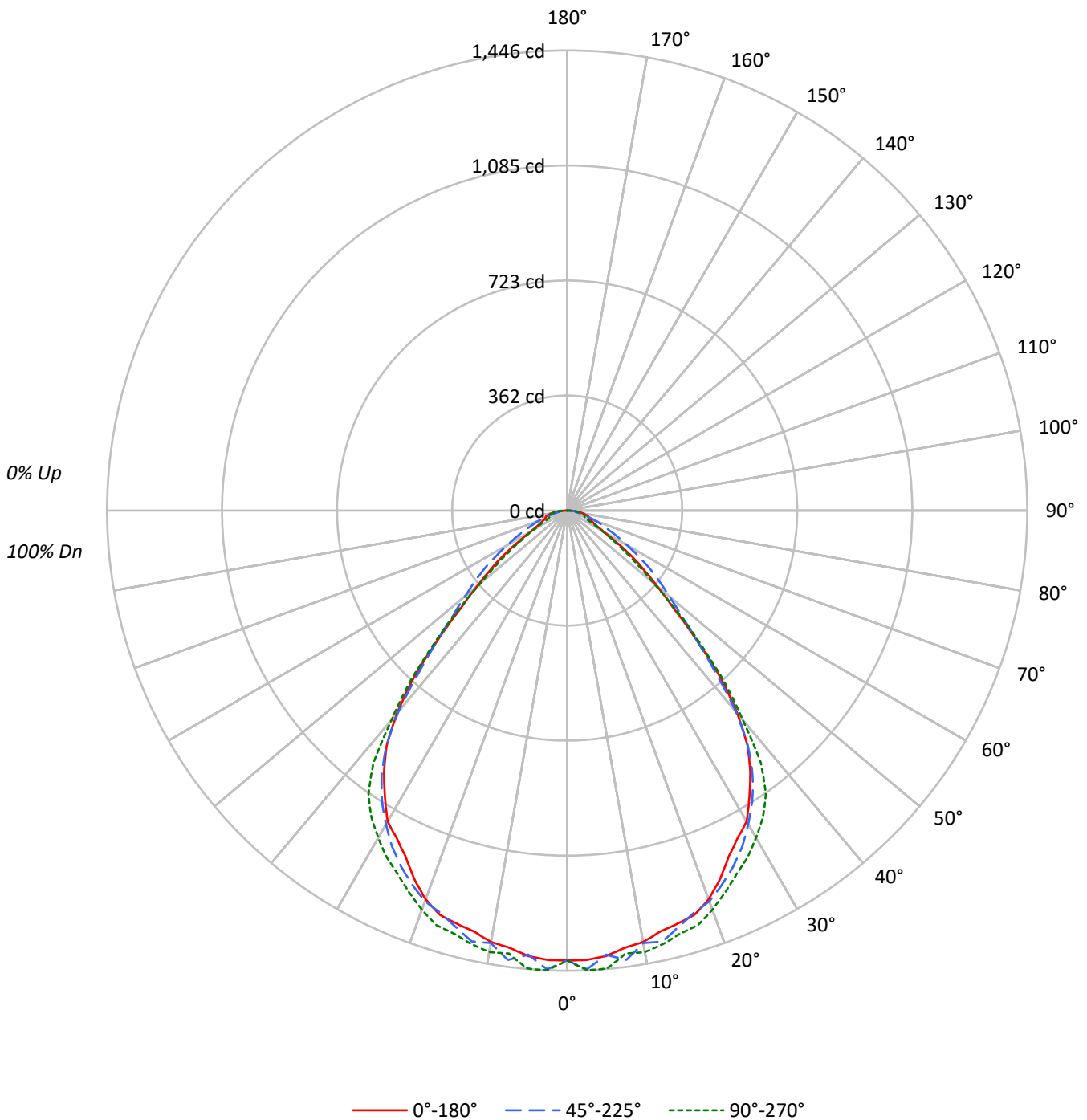
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3805	3805	3805
5°	3795	3783	3902
10°	3760	3771	3850
15°	3743	3772	3832
20°	3723	3742	3822
25°	3564	3665	3741
30°	3506	3537	3688
35°	3297	3339	3576
40°	2921	2901	3016
45°	2182	2187	2248
50°	1536	1747	1488
55°	1133	1476	1017
60°	709	1166	664
65°	578	924	464
70°	574	769	458
75°	711	565	592
80°	792	446	724
85°	790	827	809



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.6	5.0
10°-20°	383.4	14.1
20°-30°	567.8	20.9
30°-40°	636.0	23.4
40°-50°	467.4	17.2
50°-60°	261.2	9.6
60°-70°	145.6	5.4
70°-80°	85.5	3.2
80°-90°	31.4	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°	1085.8	40.0
0°-40°	1721.8	63.5
0°-60°	2450.4	90.3
0°-90°	2713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2713.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1414	1414	1414	1414	1414	
5°	1405	1431	1400	1429	1445	133
15°	1344	1352	1354	1374	1376	379
25°	1200	1210	1234	1252	1260	556
35°	1004	1004	1016	1062	1089	622
45°	573	620	575	616	591	448
55°	242	294	314	314	217	216
65°	91	161	145	186	73	94
75°	68	96	54	109	57	69
85°	26	38	27	34	26	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1413.9	1413.9	1413.9	1413.9	1413.9
2.5°	1413.3	1426.1	1442.7	1444.6	1445.9
5°	1405.0	1431.2	1400.5	1429.3	1444.6
7.5°	1385.8	1401.8	1424.2	1395.4	1403.7
10°	1376.2	1380.1	1380.1	1415.9	1408.8
12.5°	1354.5	1380.1	1386.5	1379.4	1394.8
15°	1343.6	1351.9	1353.9	1374.3	1375.6
17.5°	1331.5	1329.6	1325.1	1339.8	1366.0
20°	1300.2	1293.1	1306.6	1324.5	1334.7
22.5°	1254.1	1256.1	1272.0	1286.7	1298.2
25°	1200.4	1210.0	1234.3	1251.6	1259.9
27.5°	1160.2	1174.2	1190.9	1211.3	1227.9
30°	1128.2	1126.9	1138.4	1167.8	1187.0
32.5°	1066.2	1070.7	1082.8	1118.0	1144.8
35°	1003.6	1004.2	1016.3	1062.4	1088.6
37.5°	931.3	926.2	933.3	983.1	1000.4
40°	831.6	832.9	825.9	861.0	858.5
42.5°	715.3	725.5	689.1	735.1	731.9
45°	573.4	620.0	574.7	615.6	590.6
47.5°	452.6	521.6	483.9	513.9	467.3
50°	366.9	437.9	417.4	430.8	355.4
52.5°	301.1	358.6	365.0	368.2	277.4
55°	241.6	294.0	314.5	313.9	216.7
57.5°	178.3	239.1	262.7	272.3	164.3
60°	131.7	198.8	216.7	237.8	123.4
62.5°	106.1	174.5	179.0	208.4	94.0
65°	90.8	161.1	145.1	186.0	72.9
67.5°	80.5	150.2	118.3	166.2	62.0
70°	72.9	133.6	97.8	148.9	58.2
72.5°	71.0	113.8	75.4	133.0	57.5
75°	68.4	96.5	54.3	109.3	56.9
77.5°	58.8	82.5	39.0	84.4	53.1
80°	51.1	65.8	28.8	63.3	46.7
82.5°	39.6	49.9	25.6	47.9	37.7
85°	25.6	37.7	26.8	34.5	26.2
87.5°	12.1	21.1	19.2	18.5	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)