

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: P292556

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292556
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-LD5-20-A19/156-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2080.0 lumens
Efficiency: N/A
Efficacy: 132.3 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

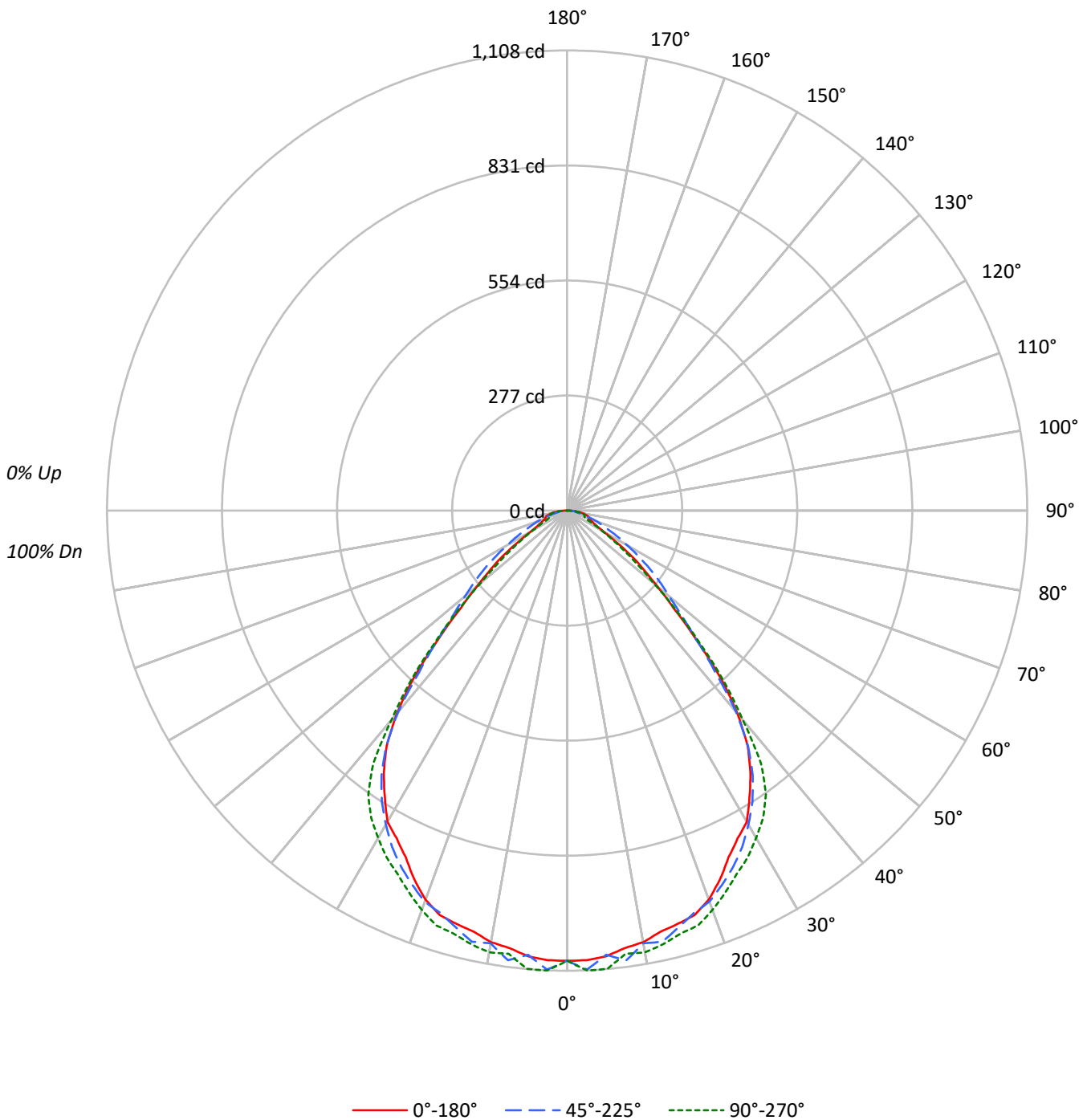
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2917	2917	2917
5°	2910	2900	2992
10°	2883	2891	2951
15°	2870	2892	2938
20°	2855	2869	2930
25°	2733	2810	2868
30°	2688	2712	2828
35°	2528	2560	2742
40°	2240	2224	2312
45°	1673	1677	1723
50°	1178	1340	1141
55°	869	1131	779
60°	544	894	509
65°	443	708	356
70°	440	590	351
75°	545	434	453
80°	607	342	555
85°	605	636	621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	5.0
10°-20°	293.9	14.1
20°-30°	435.3	20.9
30°-40°	487.6	23.4
40°-50°	358.3	17.2
50°-60°	200.3	9.6
60°-70°	111.6	5.4
70°-80°	65.6	3.2
80°-90°	24.1	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°	832.5	40.0
0°-40°	1320.1	63.5
0°-60°	1878.7	90.3
0°-90°	2080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2080.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1077	1097	1074	1096	1108	102
15°	1030	1036	1038	1054	1055	291
25°	920	928	946	960	966	427
35°	769	770	779	814	835	477
45°	440	475	441	472	453	343
55°	185	225	241	241	166	165
65°	70	124	111	143	56	72
75°	52	74	42	84	44	53
85°	20	29	21	26	20	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.0	1084.0	1084.0	1084.0	1084.0
2.5°	1083.5	1093.3	1106.1	1107.6	1108.5
5°	1077.2	1097.3	1073.7	1095.8	1107.6
7.5°	1062.5	1074.7	1091.9	1069.8	1076.2
10°	1055.1	1058.1	1058.1	1085.5	1080.1
12.5°	1038.5	1058.1	1063.0	1057.6	1069.3
15°	1030.1	1036.5	1038.0	1053.7	1054.6
17.5°	1020.8	1019.3	1015.9	1027.2	1047.3
20°	996.8	991.4	1001.7	1015.4	1023.3
22.5°	961.5	963.0	975.2	986.5	995.3
25°	920.4	927.7	946.3	959.6	965.9
27.5°	889.5	900.3	913.0	928.7	941.4
30°	865.0	864.0	872.8	895.4	910.1
32.5°	817.4	820.9	830.2	857.1	877.7
35°	769.4	769.9	779.2	814.5	834.6
37.5°	714.0	710.1	715.5	753.7	767.0
40°	637.6	638.6	633.2	660.1	658.2
42.5°	548.4	556.2	528.3	563.6	561.1
45°	439.6	475.4	440.6	471.9	452.8
47.5°	347.0	399.9	371.0	394.0	358.2
50°	281.3	335.7	320.0	330.3	272.5
52.5°	230.8	274.9	279.8	282.3	212.7
55°	185.2	225.4	241.1	240.6	166.1
57.5°	136.7	183.3	201.4	208.8	125.9
60°	101.0	152.4	166.1	182.3	94.6
62.5°	81.4	133.8	137.2	159.8	72.0
65°	69.6	123.5	111.2	142.6	55.9
67.5°	61.7	115.2	90.7	127.4	47.5
70°	55.9	102.4	75.0	114.2	44.6
72.5°	54.4	87.2	57.8	101.9	44.1
75°	52.4	74.0	41.7	83.8	43.6
77.5°	45.1	63.2	29.9	64.7	40.7
80°	39.2	50.5	22.1	48.5	35.8
82.5°	30.4	38.2	19.6	36.8	28.9
85°	19.6	28.9	20.6	26.5	20.1
87.5°	9.3	16.2	14.7	14.2	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)