

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: P292658

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292658
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-L92765-W2A1-U-6500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1943.0 lumens
Efficiency: N/A
Efficacy: 120.1 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

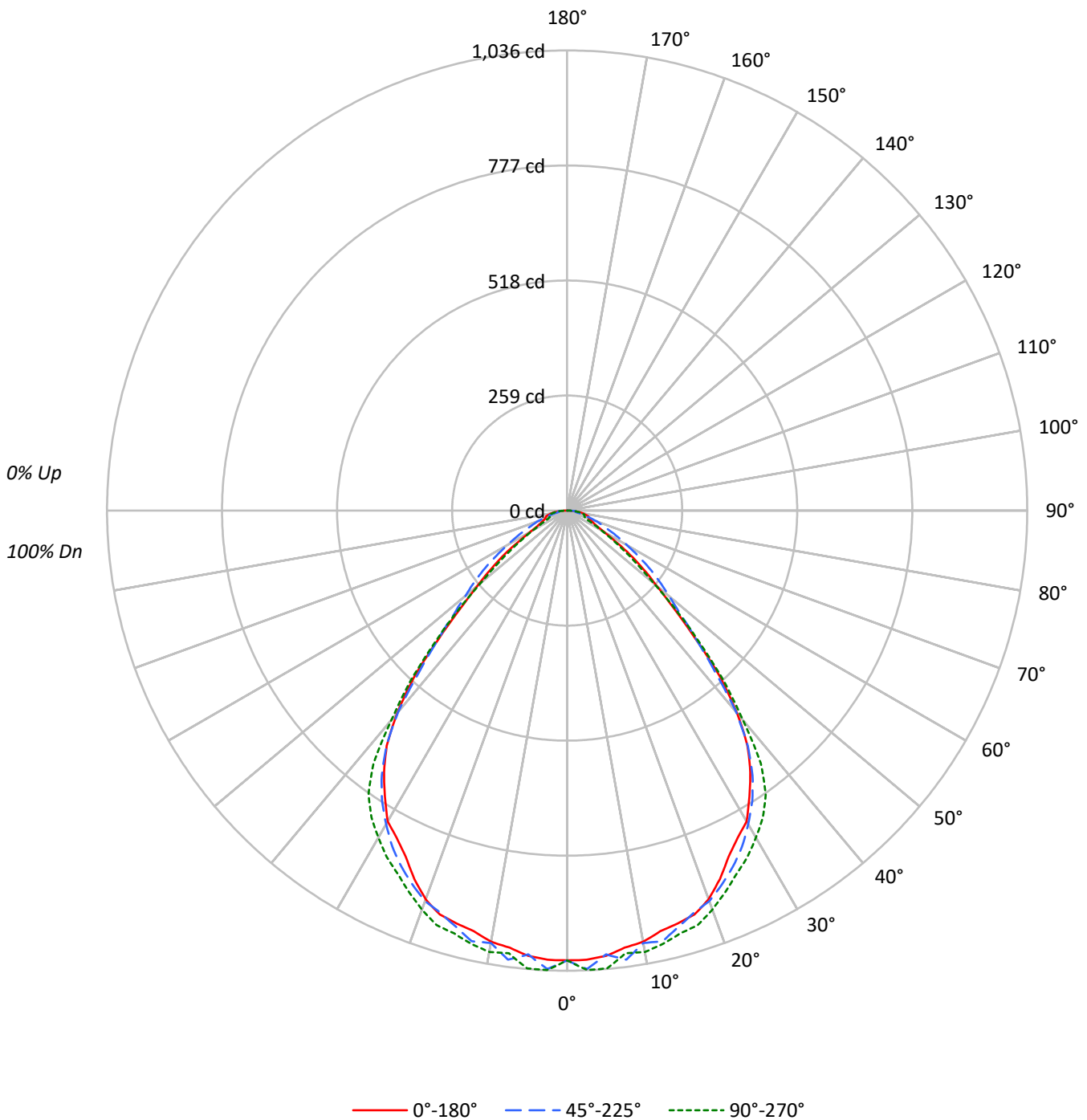
Input Watts (W): 16.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2725	2725	2725
5°	2718	2709	2795
10°	2693	2701	2757
15°	2681	2701	2745
20°	2667	2680	2737
25°	2553	2625	2679
30°	2511	2533	2641
35°	2361	2391	2561
40°	2092	2078	2160
45°	1563	1566	1610
50°	1100	1251	1065
55°	812	1057	728
60°	508	835	476
65°	414	662	332
70°	411	551	328
75°	509	404	423
80°	567	319	518
85°	565	593	580



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	5.0
10°-20°	274.6	14.1
20°-30°	406.7	20.9
30°-40°	455.5	23.4
40°-50°	334.7	17.2
50°-60°	187.1	9.6
60°-70°	104.3	5.4
70°-80°	61.3	3.2
80°-90°	22.5	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°	777.6	40.0
0°-40°	1233.2	63.5
0°-60°	1755.0	90.3
0°-90°	1943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1006	1025	1003	1024	1035	95
15°	962	968	970	984	985	272
25°	860	867	884	896	902	398
35°	719	719	728	761	780	445
45°	411	444	412	441	423	321
55°	173	211	225	225	155	154
65°	65	115	104	133	52	67
75°	49	69	39	78	41	49
85°	18	27	19	25	19	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1012.6	1012.6	1012.6	1012.6	1012.6
2.5°	1012.2	1021.3	1033.2	1034.6	1035.5
5°	1006.2	1025.0	1003.0	1023.6	1034.6
7.5°	992.5	1003.9	1020.0	999.4	1005.3
10°	985.6	988.4	988.4	1014.0	1009.0
12.5°	970.1	988.4	993.0	987.9	998.9
15°	962.3	968.2	969.6	984.3	985.2
17.5°	953.6	952.2	949.0	959.5	978.3
20°	931.2	926.1	935.7	948.5	955.9
22.5°	898.2	899.6	911.0	921.5	929.8
25°	859.7	866.6	884.0	896.4	902.3
27.5°	830.9	841.0	852.9	867.5	879.4
30°	808.0	807.1	815.3	836.4	850.1
32.5°	763.6	766.8	775.5	800.7	819.9
35°	718.7	719.2	727.9	760.9	779.6
37.5°	667.0	663.3	668.4	704.1	716.4
40°	595.6	596.5	591.5	616.6	614.8
42.5°	512.3	519.6	493.5	526.5	524.2
45°	410.6	444.1	411.6	440.9	423.0
47.5°	324.1	373.6	346.5	368.1	334.6
50°	262.8	313.6	298.9	308.6	254.5
52.5°	215.6	256.8	261.4	263.7	198.7
55°	173.0	210.6	225.2	224.8	155.2
57.5°	127.7	171.2	188.2	195.0	117.7
60°	94.3	142.4	155.2	170.3	88.4
62.5°	76.0	125.0	128.2	149.2	67.3
65°	65.0	115.4	103.9	133.2	52.2
67.5°	57.7	107.6	84.7	119.0	44.4
70°	52.2	95.7	70.0	106.7	41.7
72.5°	50.8	81.5	54.0	95.2	41.2
75°	49.0	69.1	38.9	78.3	40.7
77.5°	42.1	59.1	27.9	60.4	38.0
80°	36.6	47.2	20.6	45.3	33.4
82.5°	28.4	35.7	18.3	34.3	27.0
85°	18.3	27.0	19.2	24.7	18.8
87.5°	8.7	15.1	13.7	13.3	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)