

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: P292652

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292652
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-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1752.0 lumens
Efficiency: N/A
Efficacy: 113.5 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

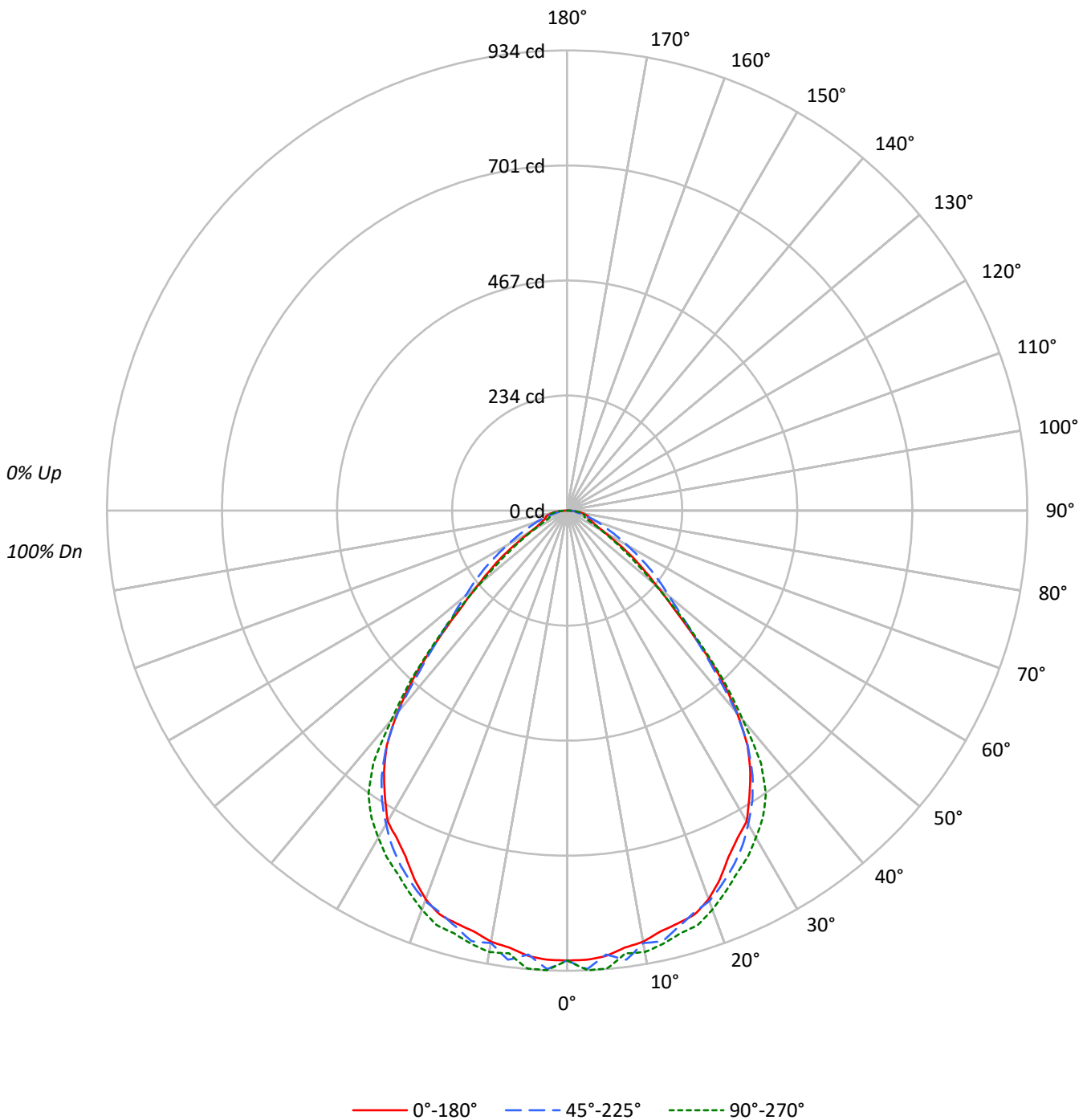
Input Watts (W): 15.438
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	91	90	88
2	103	96	90	85	100	94	89	85	91	86	83		88	84	81		85	82	79	77
3	95	86	79	74	93	85	79	73	82	77	72		79	75	71		77	73	70	68
4	88	78	71	65	86	77	70	64	75	68	64		72	67	63		70	66	62	60
5	82	71	63	58	80	70	63	57	68	62	57		66	61	56		64	59	56	54
6	77	65	57	51	75	64	57	51	62	56	51		61	55	50		59	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46		56	50	46		55	49	45	44
8	67	55	47	42	66	54	47	42	53	46	42		52	46	41		51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	47	40	35	46	39	35		45	39	35		44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2457	2457	2457
5°	2451	2443	2520
10°	2428	2435	2486
15°	2417	2436	2475
20°	2404	2416	2468
25°	2302	2367	2416
30°	2264	2284	2382
35°	2129	2156	2309
40°	1886	1873	1948
45°	1409	1412	1451
50°	992	1129	961
55°	732	953	656
60°	457	753	429
65°	373	597	300
70°	371	497	296
75°	460	365	382
80°	511	288	466
85°	509	534	522



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	5.0
10°-20°	247.6	14.1
20°-30°	366.7	20.9
30°-40°	410.7	23.4
40°-50°	301.8	17.2
50°-60°	168.7	9.6
60°-70°	94.0	5.4
70°-80°	55.3	3.2
80°-90°	20.3	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°	701.2	40.0
0°-40°	1111.9	63.5
0°-60°	1582.4	90.3
0°-90°	1752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1752.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	907	924	904	923	933	86
15°	868	873	874	888	888	245
25°	775	781	797	808	814	359
35°	648	648	656	686	703	401
45°	370	400	371	398	381	289
55°	156	190	203	203	140	139
65°	59	104	94	120	47	61
75°	44	62	35	71	37	44
85°	16	24	17	22	17	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	913.1	913.1	913.1	913.1	913.1
2.5°	912.7	920.9	931.7	932.9	933.7
5°	907.3	924.2	904.4	923.0	932.9
7.5°	894.9	905.3	919.7	901.1	906.5
10°	888.7	891.2	891.2	914.3	909.8
12.5°	874.7	891.2	895.3	890.8	900.7
15°	867.7	873.1	874.3	887.5	888.3
17.5°	859.8	858.6	855.7	865.2	882.1
20°	839.6	835.1	843.7	855.3	861.9
22.5°	809.9	811.1	821.5	830.9	838.4
25°	775.2	781.4	797.1	808.2	813.6
27.5°	749.2	758.3	769.0	782.2	793.0
30°	728.6	727.8	735.2	754.2	766.6
32.5°	688.5	691.4	699.3	722.0	739.3
35°	648.1	648.5	656.3	686.1	703.0
37.5°	601.4	598.1	602.7	634.9	646.0
40°	537.0	537.9	533.3	556.0	554.4
42.5°	461.9	468.5	445.0	474.7	472.6
45°	370.3	400.4	371.1	397.5	381.4
47.5°	292.3	336.8	312.5	331.9	301.8
50°	236.9	282.8	269.6	278.2	229.5
52.5°	194.4	231.6	235.7	237.8	179.2
55°	156.0	189.9	203.1	202.7	139.9
57.5°	115.2	154.4	169.7	175.8	106.1
60°	85.0	128.4	139.9	153.6	79.7
62.5°	68.5	112.7	115.6	134.6	60.7
65°	58.6	104.0	93.7	120.1	47.1
67.5°	52.0	97.0	76.4	107.3	40.0
70°	47.1	86.3	63.2	96.2	37.6
72.5°	45.8	73.5	48.7	85.9	37.2
75°	44.2	62.3	35.1	70.6	36.7
77.5°	38.0	53.3	25.2	54.5	34.3
80°	33.0	42.5	18.6	40.9	30.1
82.5°	25.6	32.2	16.5	31.0	24.4
85°	16.5	24.4	17.3	22.3	16.9
87.5°	7.8	13.6	12.4	12.0	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)