

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: P292554

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292554
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-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1999.0 lumens
Efficiency: N/A
Efficacy: 128.7 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

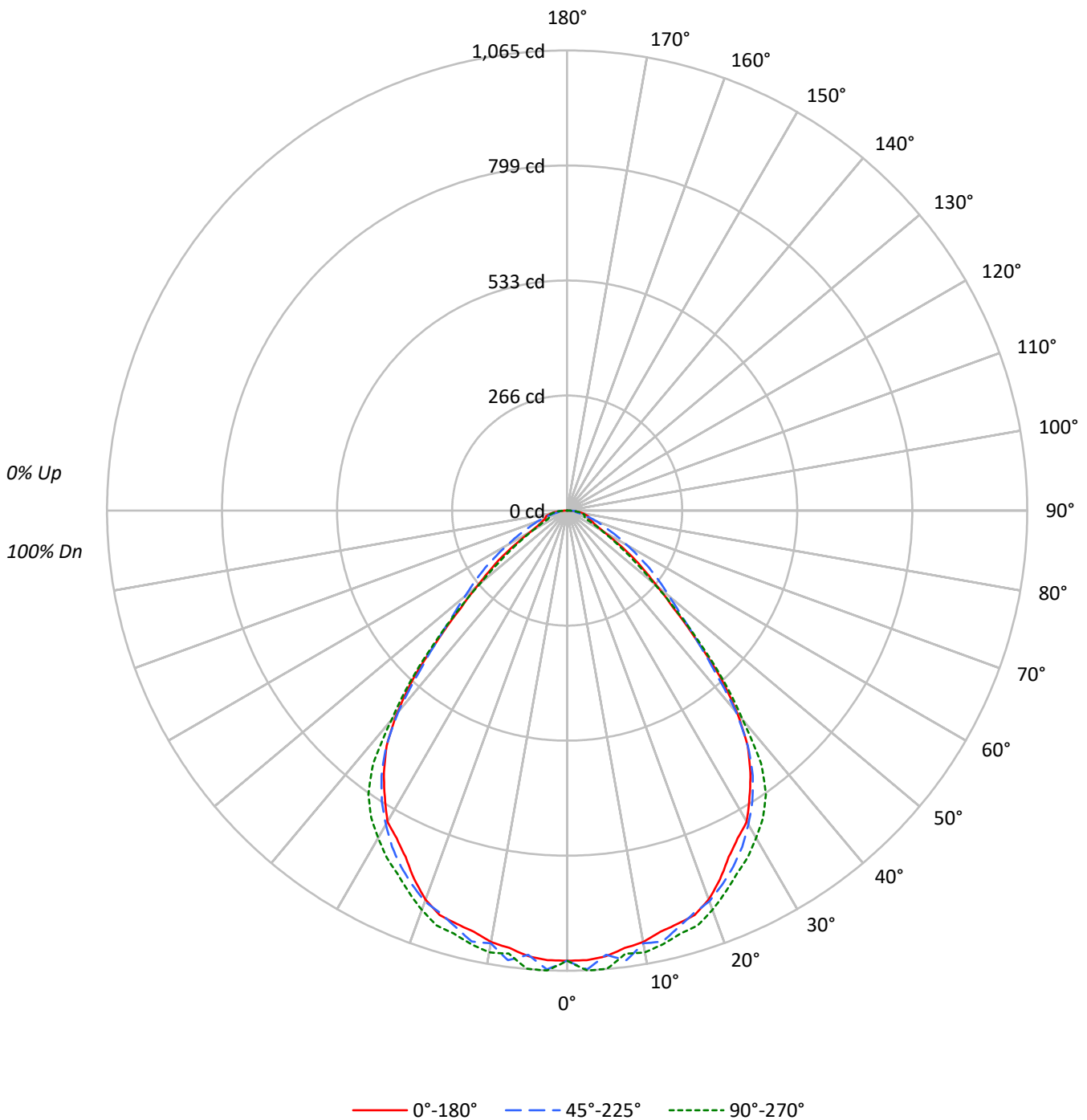
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2803	2803	2803
5°	2796	2787	2875
10°	2771	2779	2837
15°	2758	2779	2824
20°	2743	2757	2816
25°	2626	2700	2756
30°	2583	2606	2718
35°	2429	2460	2635
40°	2153	2138	2222
45°	1608	1611	1656
50°	1132	1288	1096
55°	835	1087	749
60°	522	859	489
65°	426	681	342
70°	423	567	338
75°	524	416	436
80°	584	329	533
85°	580	611	596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.2	5.0
10°-20°	282.5	14.1
20°-30°	418.4	20.9
30°-40°	468.6	23.4
40°-50°	344.4	17.2
50°-60°	192.5	9.6
60°-70°	107.3	5.4
70°-80°	63.0	3.2
80°-90°	23.2	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°	800.1	40.0
0°-40°	1268.7	63.5
0°-60°	1805.5	90.3
0°-90°	1999.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1042	1042	1042	1042	1042	
5°	1035	1054	1032	1053	1064	98
15°	990	996	998	1013	1014	280
25°	884	892	910	922	928	410
35°	739	740	749	783	802	458
45°	422	457	423	454	435	330
55°	178	217	232	231	160	159
65°	67	119	107	137	54	69
75°	50	71	40	80	42	51
85°	19	28	20	25	19	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1041.8	1041.8	1041.8	1041.8	1041.8
2.5°	1041.4	1050.8	1063.0	1064.4	1065.4
5°	1035.2	1054.5	1031.9	1053.1	1064.4
7.5°	1021.1	1032.9	1049.4	1028.2	1034.3
10°	1014.0	1016.9	1016.9	1043.2	1038.1
12.5°	998.0	1016.9	1021.6	1016.4	1027.7
15°	990.0	996.1	997.6	1012.6	1013.6
17.5°	981.1	979.7	976.4	987.2	1006.5
20°	958.0	952.8	962.7	975.9	983.4
22.5°	924.1	925.5	937.3	948.1	956.6
25°	884.5	891.6	909.5	922.2	928.3
27.5°	854.8	865.2	877.4	892.5	904.8
30°	831.3	830.4	838.8	860.5	874.6
32.5°	785.6	788.9	797.9	823.8	843.5
35°	739.4	739.9	748.9	782.8	802.1
37.5°	686.2	682.5	687.6	724.4	737.1
40°	612.8	613.7	608.5	634.4	632.5
42.5°	527.0	534.6	507.7	541.6	539.3
45°	422.5	456.9	423.4	453.6	435.2
47.5°	333.5	384.3	356.5	378.7	344.3
50°	270.3	322.6	307.6	317.4	261.9
52.5°	221.8	264.2	268.9	271.3	204.4
55°	178.0	216.7	231.7	231.3	159.7
57.5°	131.4	176.1	193.6	200.6	121.0
60°	97.0	146.5	159.7	175.2	90.9
62.5°	78.2	128.6	131.9	153.5	69.2
65°	66.9	118.7	106.9	137.1	53.7
67.5°	59.3	110.7	87.1	122.5	45.7
70°	53.7	98.4	72.1	109.7	42.9
72.5°	52.3	83.8	55.6	98.0	42.4
75°	50.4	71.1	40.0	80.5	41.9
77.5°	43.3	60.8	28.7	62.2	39.1
80°	37.7	48.5	21.2	46.6	34.4
82.5°	29.2	36.7	18.8	35.3	27.8
85°	18.8	27.8	19.8	25.4	19.3
87.5°	8.9	15.5	14.1	13.7	9.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)