

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: P292224

Luminaire Tested: **22GR-LD5-20-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292224
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-A-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1762.0 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

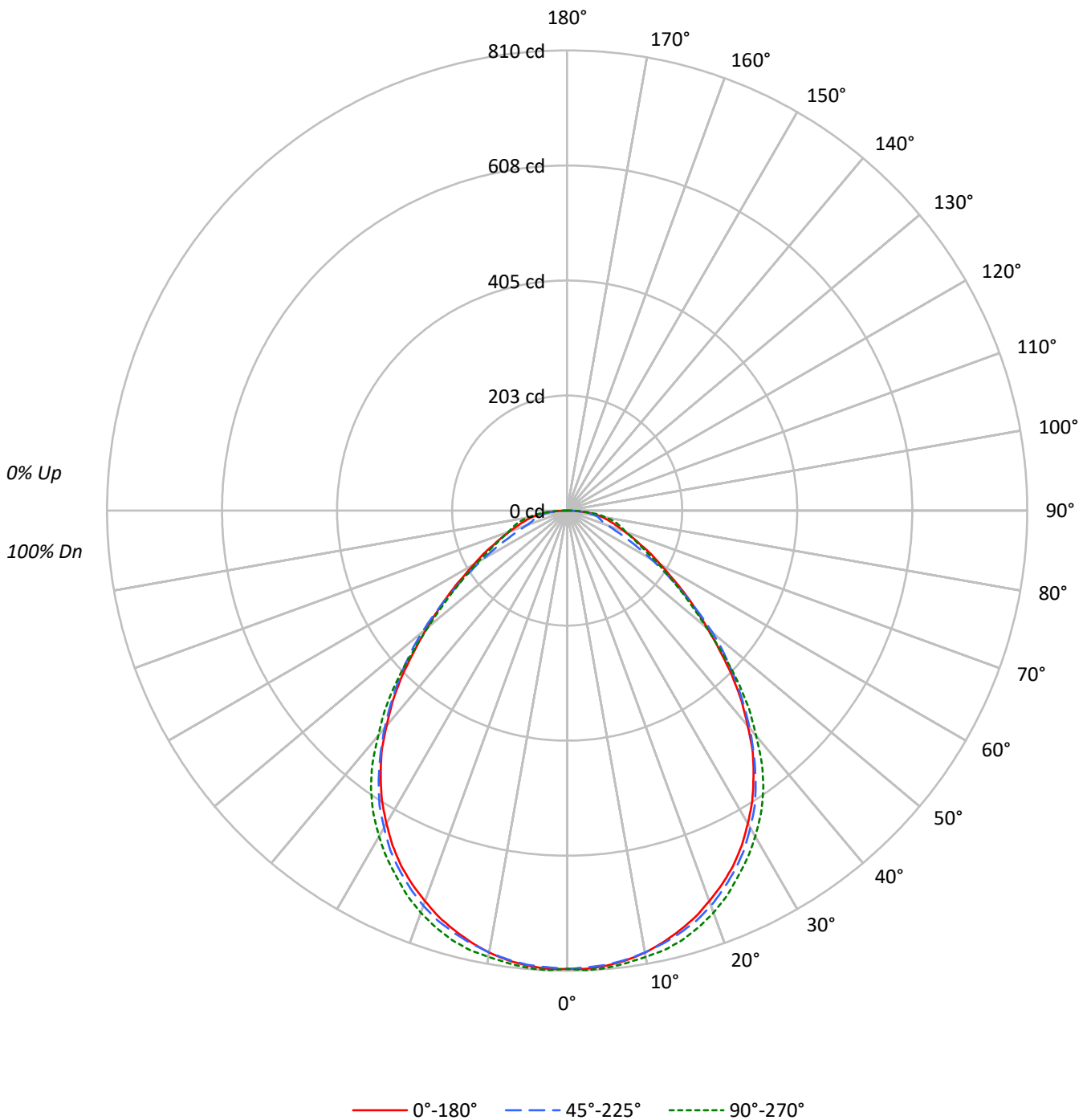
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2171	2171	2171
5°	2172	2169	2182
10°	2159	2158	2179
15°	2131	2143	2181
20°	2095	2119	2157
25°	2050	2073	2111
30°	1976	2003	2058
35°	1879	1900	1977
40°	1737	1756	1818
45°	1560	1588	1614
50°	1349	1397	1335
55°	1177	1147	1131
60°	1019	918	980
65°	911	721	880
70°	845	597	868
75°	844	631	964
80°	934	795	1086
85°	976	861	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	4.3
10°-20°	217.5	12.3
20°-30°	321.7	18.3
30°-40°	363.0	20.6
40°-50°	320.0	18.2
50°-60°	219.5	12.5
60°-70°	129.5	7.4
70°-80°	80.8	4.6
80°-90°	33.7	1.9
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°	615.5	34.9
0°-40°	978.5	55.5
0°-60°	1517.9	86.1
0°-90°	1762.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	804	802	803	806	808	76
15°	765	766	769	779	783	216
25°	690	693	698	707	711	317
35°	572	577	578	592	602	356
45°	410	412	417	420	424	315
55°	251	245	244	236	241	225
65°	143	126	113	131	138	144
75°	81	73	61	85	93	87
85°	32	30	28	36	40	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	806.9	806.9	806.9	806.9	806.9
2.5°	807.3	805.3	804.5	807.8	809.8
5°	804.1	802.4	802.8	805.7	807.8
7.5°	798.3	797.1	797.1	801.2	803.2
10°	790.1	789.7	789.7	794.6	797.5
12.5°	778.6	779.1	780.7	787.3	792.2
15°	765.1	765.9	769.2	778.6	782.7
17.5°	750.3	750.3	756.9	764.3	769.2
20°	731.5	732.7	740.1	748.3	753.2
22.5°	712.2	714.3	720.4	729.8	734.4
25°	690.5	692.9	698.3	707.3	711.0
27.5°	665.1	668.3	674.1	680.6	688.4
30°	636.0	640.9	644.6	653.6	662.2
32.5°	606.4	610.9	615.0	624.5	634.3
35°	572.0	576.9	578.5	592.5	601.9
37.5°	536.7	538.8	539.6	553.5	563.8
40°	494.5	498.6	499.8	510.9	517.5
42.5°	453.9	455.5	458.0	466.2	474.0
45°	410.0	412.1	417.4	419.9	424.0
47.5°	364.1	370.3	376.4	368.6	369.0
50°	322.3	327.2	333.8	319.0	319.0
52.5°	285.0	287.4	287.8	275.5	278.0
55°	250.9	244.8	244.4	236.2	241.1
57.5°	216.9	208.7	205.8	203.4	209.1
60°	189.4	174.7	170.6	174.3	182.1
62.5°	166.9	148.0	140.2	149.7	156.6
65°	143.1	125.9	113.2	130.8	138.2
67.5°	124.6	108.2	91.8	116.9	122.2
70°	107.4	94.7	75.9	106.2	110.3
72.5°	93.5	83.6	65.6	95.9	100.9
75°	81.2	73.0	60.7	84.9	92.7
77.5°	71.3	62.3	56.6	73.4	82.8
80°	60.3	51.3	51.3	61.5	70.1
82.5°	47.6	40.2	41.4	50.0	56.2
85°	31.6	29.5	27.9	36.5	39.8
87.5°	16.0	16.4	14.8	18.9	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)