

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: P291735

Luminaire Tested: **22GR-LD5-20-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291735
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-F1-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2183.0 lumens
Efficiency: N/A
Efficacy: 138.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

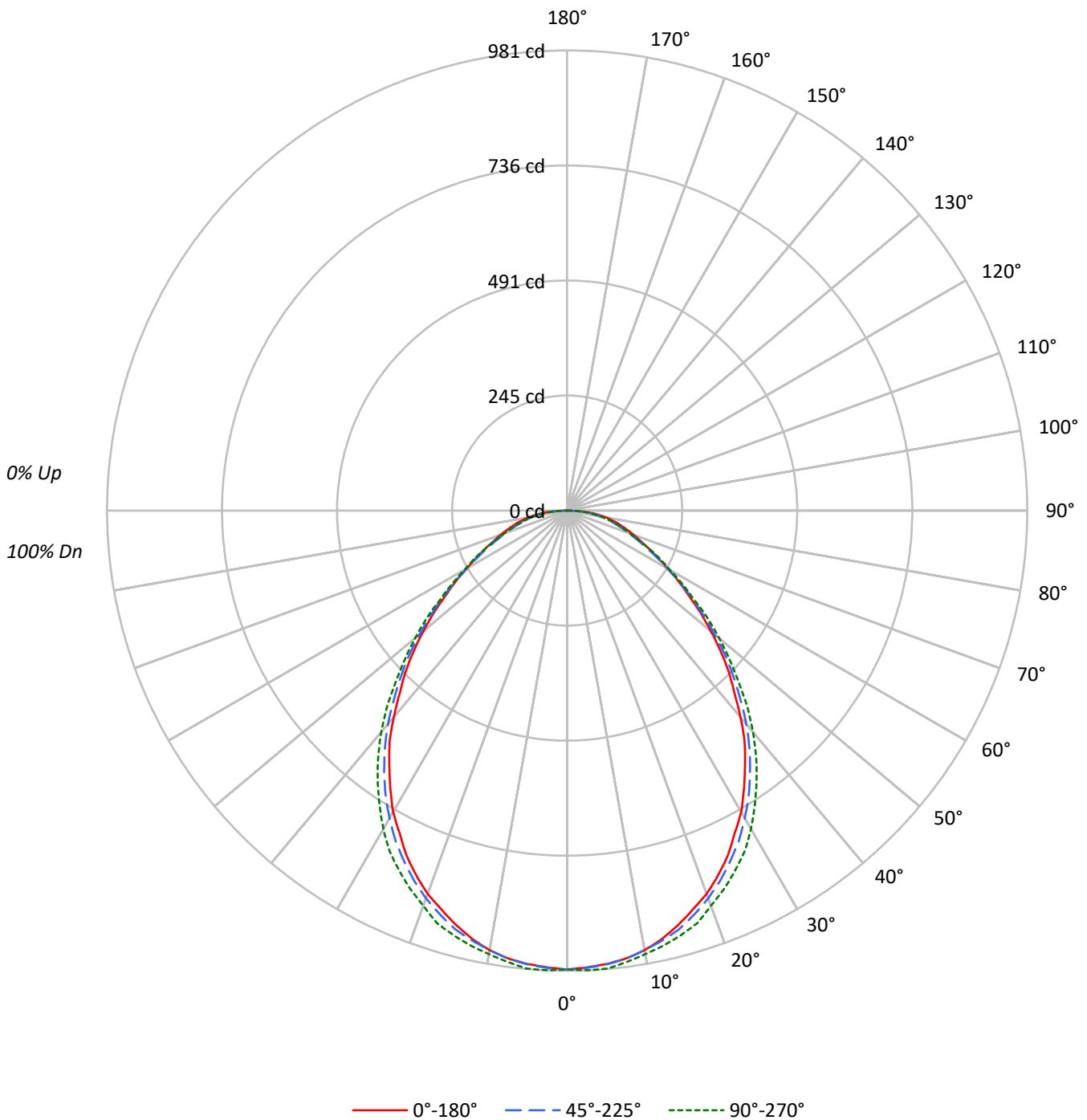
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																												
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73																												
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																												
4	85	74	66	59	83	73	65	59	70	63	58	68	62	57	66	61	57	55																												
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48																												
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	55	49	45	43																												
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38																												
8	63	51	42	37	62	50	42	37	49	42	37	47	41	36	46	40	36	34																												
9	59	47	39	33	58	46	39	33	45	38	33	44	38	33	43	37	33	31																												
10	56	43	36	31	55	43	35	30	42	35	30	41	35	30	40	34	30	28																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2632	2632	2632
5°	2621	2623	2648
10°	2601	2599	2624
15°	2548	2573	2611
20°	2490	2519	2567
25°	2407	2446	2515
30°	2306	2353	2435
35°	2171	2234	2313
40°	2020	2089	2165
45°	1855	1908	1968
50°	1673	1715	1770
55°	1484	1520	1545
60°	1330	1333	1360
65°	1226	1184	1226
70°	1183	1097	1128
75°	1204	1074	1095
80°	1297	1127	1127
85°	1439	1192	1176



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	4.2
10°-20°	260.3	11.9
20°-30°	379.9	17.4
30°-40°	425.3	19.5
40°-50°	387.1	17.7
50°-60°	291.3	13.3
60°-70°	190.1	8.7
70°-80°	114.0	5.2
80°-90°	42.8	2.0
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°	732.4	33.6
0°-40°	1157.7	53.0
0°-60°	1836.1	84.1
0°-90°	2183.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2183.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	970	969	971	975	980	92
15°	915	916	924	931	937	258
25°	811	813	824	839	847	372
35°	661	667	680	696	704	413
45°	487	492	501	512	517	375
55°	316	321	324	328	329	286
65°	192	190	186	189	192	193
75°	116	112	103	104	105	123
85°	47	45	39	37	38	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	978.2	978.2	978.2	978.2	978.2
2.5°	974.7	974.2	975.7	978.2	980.8
5°	970.2	968.7	971.2	974.7	980.3
7.5°	963.2	963.2	963.2	969.7	970.7
10°	951.7	952.7	951.2	957.7	960.2
12.5°	935.1	935.6	938.6	945.2	949.7
15°	914.6	915.6	923.6	931.1	937.1
17.5°	891.5	895.0	902.5	914.6	922.1
20°	869.4	873.5	879.5	892.5	896.5
22.5°	841.4	845.9	853.4	864.9	873.5
25°	810.8	813.3	823.8	838.9	846.9
27.5°	774.2	779.7	792.7	808.3	819.3
30°	742.1	745.1	757.1	775.2	783.7
32.5°	701.5	710.5	720.5	736.6	744.6
35°	660.9	666.9	679.9	696.0	704.0
37.5°	621.7	625.3	638.3	651.8	661.9
40°	575.1	581.6	594.7	609.2	616.2
42.5°	528.5	538.0	546.5	561.1	568.6
45°	487.4	492.4	501.4	511.9	517.0
47.5°	444.2	446.8	457.3	463.8	469.3
50°	399.6	402.6	409.7	416.2	422.7
52.5°	358.5	361.0	365.5	371.5	378.1
55°	316.4	320.9	323.9	328.4	329.4
57.5°	282.3	281.8	283.8	287.3	290.8
60°	247.2	248.2	247.7	251.2	252.7
62.5°	218.1	217.6	214.6	219.6	223.6
65°	192.5	190.5	186.0	189.0	192.5
67.5°	169.0	168.0	160.5	163.0	166.0
70°	150.4	146.9	139.4	140.9	143.4
72.5°	132.4	128.4	120.8	121.3	122.8
75°	115.8	111.8	103.3	103.8	105.3
77.5°	100.3	95.3	87.7	86.7	87.7
80°	83.7	79.2	72.7	69.7	72.7
82.5°	66.7	64.2	56.7	53.7	54.7
85°	46.6	45.1	38.6	36.6	38.1
87.5°	21.6	23.1	19.6	18.1	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)