

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: P277386

Luminaire Tested: **22CZ2-20HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277386
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-S-UNV-L82765-W2A1-U-5500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2208.0 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

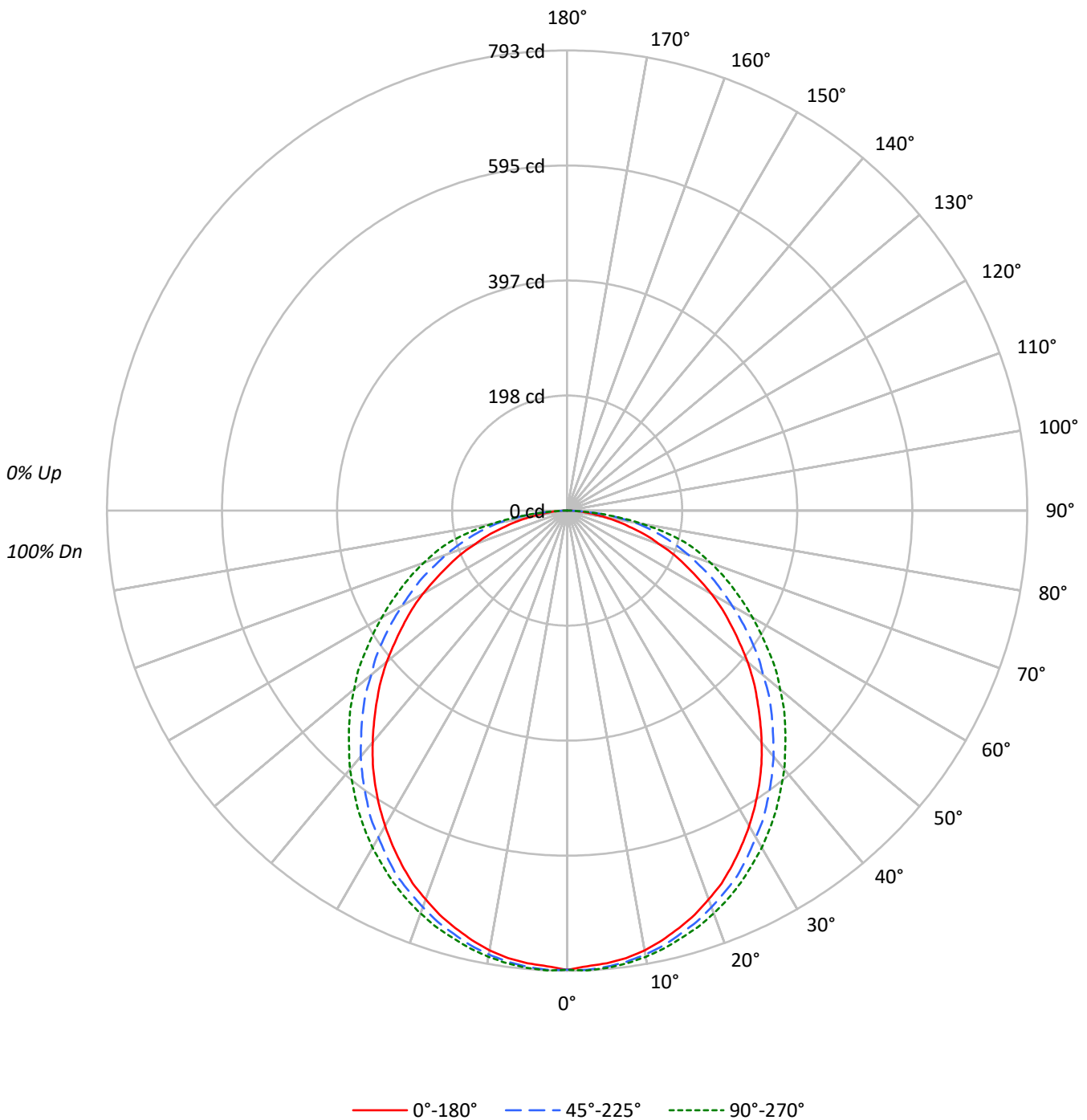
Input Watts (W): 15.996
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2129	2129	2129
5°	2115	2132	2137
10°	2103	2123	2134
15°	2075	2104	2124
20°	2042	2083	2115
25°	2001	2062	2101
30°	1950	2020	2084
35°	1895	1983	2064
40°	1831	1943	2045
45°	1764	1897	2023
50°	1699	1846	2005
55°	1619	1812	1991
60°	1547	1769	1985
65°	1443	1758	2007
70°	1330	1743	2067
75°	1200	1768	2174
80°	1038	1819	2044
85°	858	1525	1525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.8	3.4
10°-20°	212.9	9.6
20°-30°	318.6	14.4
30°-40°	377.3	17.1
40°-50°	384.5	17.4
50°-60°	344.6	15.6
60°-70°	269.8	12.2
70°-80°	174.0	7.9
80°-90°	51.4	2.3
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°	606.3	27.5
0°-40°	983.6	44.5
0°-60°	1712.8	77.6
0°-90°	2208.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2208.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	783	785	789	790	791	74
15°	745	749	755	761	762	210
25°	674	680	694	704	708	310
35°	577	584	604	622	628	361
45°	464	474	499	524	532	358
55°	345	356	386	413	424	309
65°	227	240	276	303	315	225
75°	115	133	170	199	209	124
85°	28	38	49	49	49	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	791.2	791.2	791.2	791.2	791.2
2.5°	786.0	788.1	792.2	793.3	793.3
5°	783.0	785.0	789.1	790.2	791.2
7.5°	777.8	778.8	784.0	786.0	787.1
10°	769.6	771.6	776.8	779.9	780.9
12.5°	758.2	761.3	767.5	771.6	772.7
15°	744.8	749.0	755.1	761.3	762.3
17.5°	730.4	734.5	742.8	750.0	752.0
20°	712.9	718.1	727.3	735.6	738.7
22.5°	695.4	699.5	710.8	721.1	724.2
25°	673.8	679.9	694.4	703.6	707.7
27.5°	651.1	658.3	672.7	685.1	689.2
30°	627.4	634.6	650.1	665.5	670.7
32.5°	602.7	610.9	629.5	644.9	650.1
35°	576.9	584.1	603.7	622.2	628.4
37.5°	550.1	556.3	579.0	598.5	604.7
40°	521.3	529.5	553.2	575.9	582.1
42.5°	492.4	501.7	525.4	550.1	556.3
45°	463.6	473.9	498.6	524.4	531.6
47.5°	435.8	444.0	471.8	496.6	506.9
50°	405.9	414.1	440.9	468.7	479.0
52.5°	375.0	386.3	415.2	442.0	454.3
55°	345.1	356.4	386.3	413.1	424.4
57.5°	317.3	326.6	357.5	385.3	396.6
60°	287.4	295.7	328.6	358.5	368.8
62.5°	255.5	267.9	301.8	329.7	342.0
65°	226.6	240.0	276.1	302.9	315.2
67.5°	199.9	212.2	247.2	276.1	289.5
70°	169.0	185.4	221.5	250.3	262.7
72.5°	144.2	158.7	195.7	224.6	238.0
75°	115.4	132.9	170.0	198.8	209.1
77.5°	91.7	109.2	144.2	166.9	172.0
80°	67.0	84.5	117.4	128.8	131.9
82.5°	45.3	61.8	84.5	87.6	88.6
85°	27.8	38.1	49.4	49.4	49.4
87.5°	13.4	15.5	17.5	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)