

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: P277385

Luminaire Tested: **22CZ2-20HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277385
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-5000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2186.0 lumens
Efficiency: N/A
Efficacy: 137.5 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

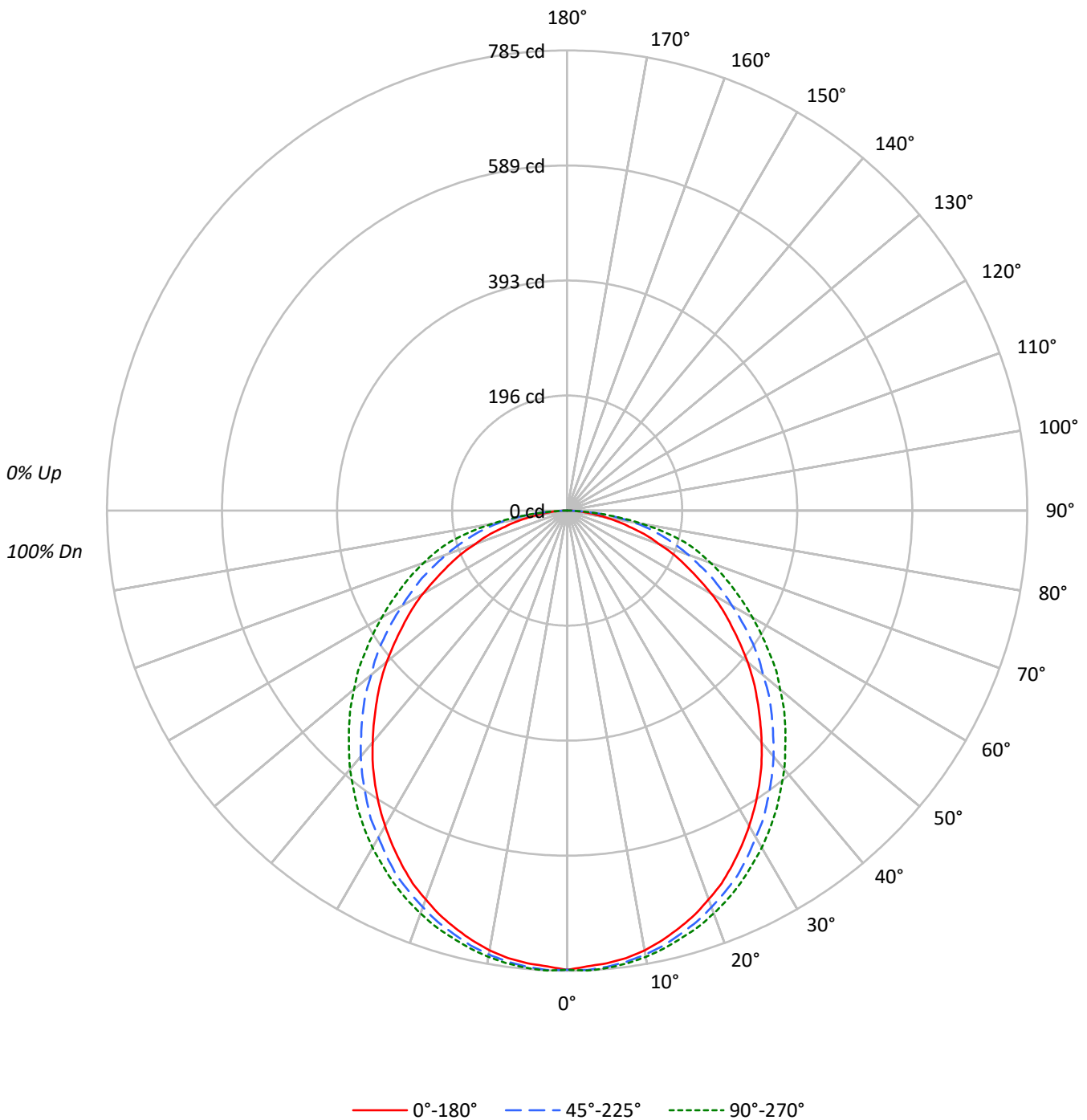
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2108	2108	2108
5°	2094	2110	2116
10°	2082	2101	2112
15°	2054	2083	2103
20°	2021	2062	2094
25°	1980	2041	2080
30°	1930	2000	2063
35°	1876	1963	2044
40°	1813	1924	2024
45°	1747	1878	2003
50°	1683	1827	1986
55°	1603	1795	1971
60°	1532	1751	1965
65°	1429	1740	1987
70°	1316	1725	2046
75°	1187	1750	2152
80°	1027	1802	2024
85°	849	1513	1513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.1	3.4
10°-20°	210.8	9.6
20°-30°	315.4	14.4
30°-40°	373.5	17.1
40°-50°	380.7	17.4
50°-60°	341.2	15.6
60°-70°	267.1	12.2
70°-80°	172.2	7.9
80°-90°	50.9	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°	600.3	27.5
0°-40°	973.9	44.5
0°-60°	1695.7	77.6
0°-90°	2186.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2186.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	775	777	781	782	783	74
15°	737	742	748	754	755	208
25°	667	673	687	697	701	307
35°	571	578	598	616	622	357
45°	459	469	494	519	526	354
55°	342	353	382	409	420	306
65°	224	238	273	300	312	223
75°	114	132	168	197	207	122
85°	28	38	49	49	49	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	783.3	783.3	783.3	783.3	783.3
2.5°	778.2	780.3	784.3	785.4	785.4
5°	775.2	777.2	781.3	782.3	783.3
7.5°	770.1	771.1	776.2	778.2	779.2
10°	761.9	763.9	769.0	772.1	773.1
12.5°	750.7	753.7	759.9	763.9	765.0
15°	737.4	741.5	747.6	753.7	754.8
17.5°	723.1	727.2	735.4	742.5	744.6
20°	705.8	710.9	720.1	728.2	731.3
22.5°	688.5	692.5	703.8	714.0	717.0
25°	667.0	673.2	687.4	696.6	700.7
27.5°	644.6	651.7	666.0	678.3	682.3
30°	621.1	628.3	643.6	658.9	664.0
32.5°	596.7	604.8	623.2	638.5	643.6
35°	571.2	578.3	597.7	616.0	622.2
37.5°	544.6	550.8	573.2	592.6	598.7
40°	516.1	524.2	547.7	570.1	576.3
42.5°	487.5	496.7	520.2	544.6	550.8
45°	459.0	469.2	493.6	519.1	526.3
47.5°	431.4	439.6	467.1	491.6	501.8
50°	401.9	410.0	436.5	464.1	474.3
52.5°	371.3	382.5	411.0	437.6	449.8
55°	341.7	352.9	382.5	409.0	420.2
57.5°	314.1	323.3	353.9	381.5	392.7
60°	284.6	292.7	325.4	354.9	365.1
62.5°	252.9	265.2	298.8	326.4	338.6
65°	224.4	237.6	273.3	299.9	312.1
67.5°	197.9	210.1	244.8	273.3	286.6
70°	167.3	183.6	219.3	247.8	260.1
72.5°	142.8	157.1	193.8	222.3	235.6
75°	114.2	131.6	168.3	196.8	207.0
77.5°	90.8	108.1	142.8	165.2	170.3
80°	66.3	83.6	116.3	127.5	130.6
82.5°	44.9	61.2	83.6	86.7	87.7
85°	27.5	37.7	49.0	49.0	49.0
87.5°	13.3	15.3	17.3	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)