

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: P277441

Luminaire Tested: **22CZ2-20HE-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277441
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-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2001.0 lumens
Efficiency: N/A
Efficacy: 125.1 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

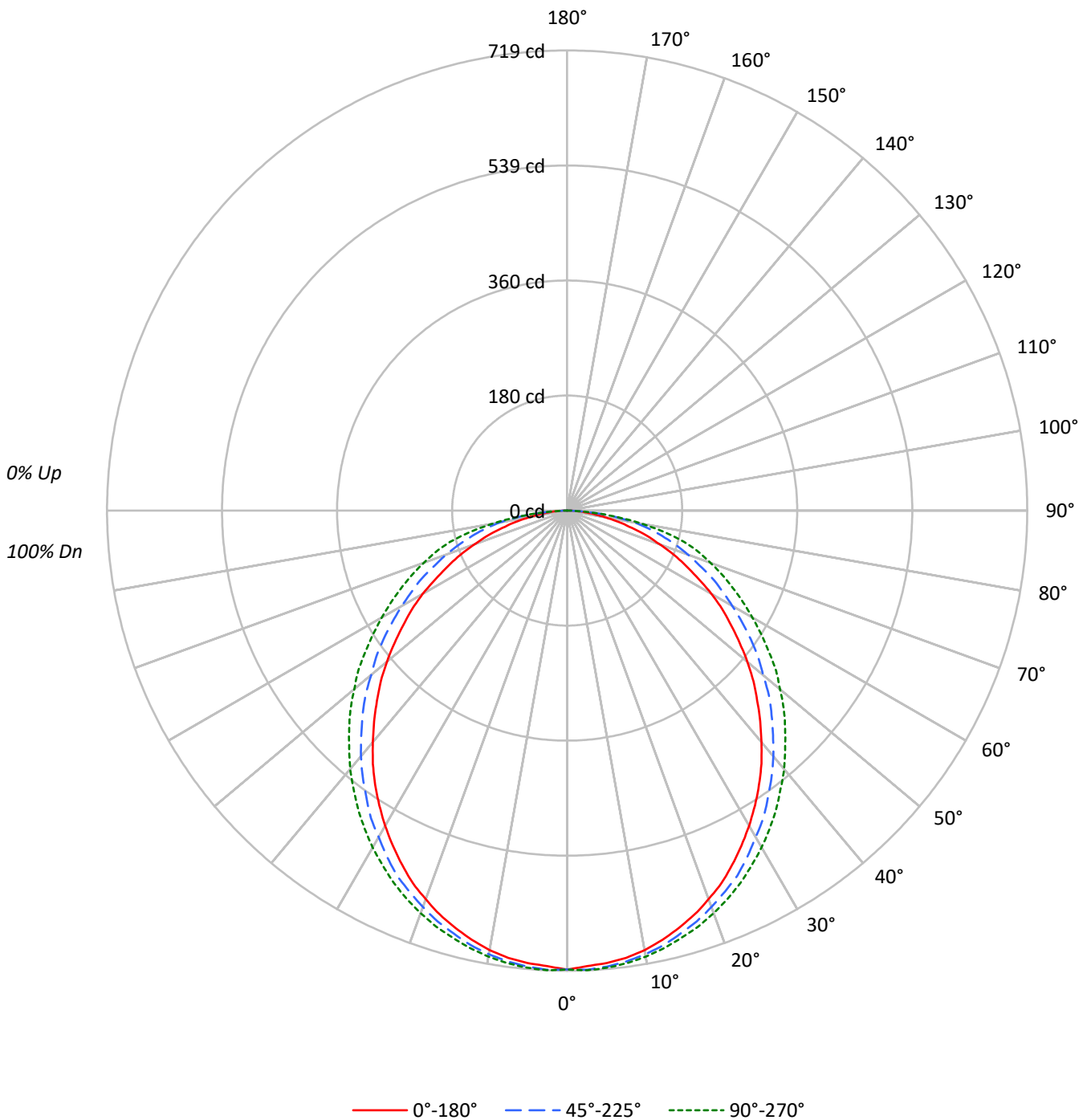
Input Watts (W): 15.996
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1929	1929	1929
5°	1917	1932	1937
10°	1906	1923	1934
15°	1880	1906	1925
20°	1850	1887	1917
25°	1813	1868	1904
30°	1767	1830	1889
35°	1717	1797	1871
40°	1659	1761	1853
45°	1599	1720	1833
50°	1540	1673	1817
55°	1468	1643	1805
60°	1402	1603	1799
65°	1308	1593	1819
70°	1205	1579	1873
75°	1088	1601	1970
80°	941	1649	1852
85°	778	1383	1383



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	3.4
10°-20°	193.0	9.6
20°-30°	288.7	14.4
30°-40°	341.9	17.1
40°-50°	348.5	17.4
50°-60°	312.3	15.6
60°-70°	244.5	12.2
70°-80°	157.7	7.9
80°-90°	46.6	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°	549.5	27.5
0°-40°	891.4	44.5
0°-60°	1552.2	77.6
0°-90°	2001.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2001.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	717	717	717	717	717	
5°	710	711	715	716	717	67
15°	675	679	684	690	691	190
25°	611	616	629	638	641	281
35°	523	529	547	564	570	327
45°	420	430	452	475	482	324
55°	313	323	350	374	385	280
65°	205	218	250	274	286	204
75°	105	120	154	180	190	112
85°	25	34	45	45	45	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	717.0	717.0	717.0	717.0	717.0
2.5°	712.4	714.2	718.0	718.9	718.9
5°	709.6	711.4	715.2	716.1	717.0
7.5°	704.9	705.8	710.5	712.4	713.3
10°	697.4	699.3	703.9	706.8	707.7
12.5°	687.1	689.9	695.5	699.3	700.2
15°	675.0	678.7	684.3	689.9	690.9
17.5°	661.9	665.7	673.1	679.7	681.5
20°	646.1	650.7	659.1	666.6	669.4
22.5°	630.2	633.9	644.2	653.5	656.3
25°	610.6	616.2	629.3	637.7	641.4
27.5°	590.0	596.6	609.7	620.9	624.6
30°	568.6	575.1	589.1	603.1	607.8
32.5°	546.2	553.6	570.4	584.4	589.1
35°	522.8	529.4	547.1	563.9	569.5
37.5°	498.6	504.2	524.7	542.4	548.0
40°	472.4	479.9	501.4	521.9	527.5
42.5°	446.3	454.7	476.1	498.6	504.2
45°	420.1	429.5	451.9	475.2	481.7
47.5°	394.9	402.4	427.6	450.0	459.3
50°	367.8	375.3	399.6	424.8	434.1
52.5°	339.8	350.1	376.2	400.5	411.7
55°	312.8	323.0	350.1	374.4	384.7
57.5°	287.6	296.0	324.0	349.2	359.4
60°	260.5	267.9	297.8	324.9	334.2
62.5°	231.5	242.7	273.6	298.8	310.0
65°	205.4	217.5	250.2	274.5	285.7
67.5°	181.1	192.3	224.1	250.2	262.3
70°	153.1	168.1	200.7	226.9	238.1
72.5°	130.7	143.8	177.4	203.5	215.7
75°	104.6	120.4	154.0	180.2	189.5
77.5°	83.1	99.0	130.7	151.2	155.9
80°	60.7	76.6	106.4	116.7	119.5
82.5°	41.1	56.0	76.6	79.4	80.3
85°	25.2	34.5	44.8	44.8	44.8
87.5°	12.1	14.0	15.9	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)