

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: P277452

Luminaire Tested: **22CZ2-29HE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277452
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: 22CZ2-29HE-S-UNV-L92765-W2A1-U-2700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2195.0 lumens
Efficiency: N/A
Efficacy: 105.8 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

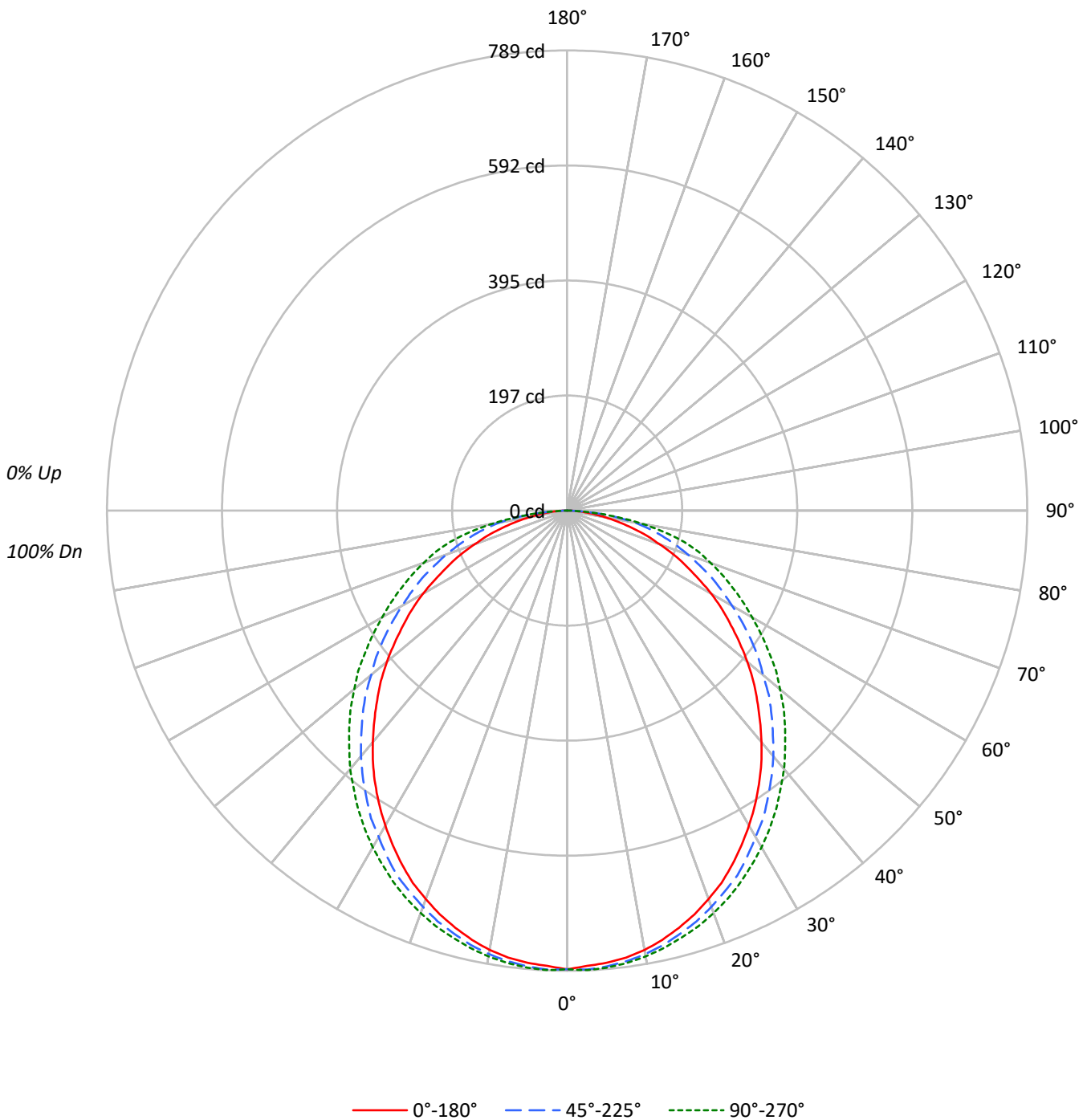
Input Watts (W): 20.739
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2116	2116	2116
5°	2102	2119	2125
10°	2090	2110	2121
15°	2063	2091	2111
20°	2029	2070	2103
25°	1989	2050	2089
30°	1938	2008	2072
35°	1884	1971	2052
40°	1820	1932	2033
45°	1754	1886	2011
50°	1689	1835	1994
55°	1610	1802	1979
60°	1538	1758	1973
65°	1435	1748	1996
70°	1322	1733	2055
75°	1193	1757	2162
80°	1032	1810	2032
85°	855	1519	1519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	3.4
10°-20°	211.7	9.6
20°-30°	316.7	14.4
30°-40°	375.1	17.1
40°-50°	382.3	17.4
50°-60°	342.6	15.6
60°-70°	268.2	12.2
70°-80°	173.0	7.9
80°-90°	51.1	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°	602.8	27.5
0°-40°	977.9	44.5
0°-60°	1702.7	77.6
0°-90°	2195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2195.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	778	780	784	786	786	74
15°	740	744	751	757	758	209
25°	670	676	690	700	704	308
35°	574	581	600	619	625	358
45°	461	471	496	521	528	356
55°	343	354	384	411	422	308
65°	225	239	274	301	313	224
75°	115	132	169	198	208	123
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°	786.5	786.5	786.5	786.5	786.5
2.5°	781.4	783.5	787.6	788.6	788.6
5°	778.3	780.4	784.5	785.5	786.5
7.5°	773.2	774.2	779.4	781.4	782.4
10°	765.0	767.1	772.2	775.3	776.3
12.5°	753.8	756.8	763.0	767.1	768.1
15°	740.5	744.5	750.7	756.8	757.9
17.5°	726.1	730.2	738.4	745.6	747.6
20°	708.7	713.8	723.0	731.2	734.3
22.5°	691.3	695.4	706.7	716.9	720.0
25°	669.8	675.9	690.3	699.5	703.6
27.5°	647.3	654.4	668.8	681.1	685.1
30°	623.7	630.9	646.2	661.6	666.7
32.5°	599.1	607.3	625.7	641.1	646.2
35°	573.5	580.7	600.1	618.6	624.7
37.5°	546.9	553.0	575.6	595.0	601.2
40°	518.2	526.4	550.0	572.5	578.6
42.5°	489.5	498.8	522.3	546.9	553.0
45°	460.9	471.1	495.7	521.3	528.5
47.5°	433.2	441.4	469.1	493.6	503.9
50°	403.5	411.7	438.3	466.0	476.2
52.5°	372.8	384.1	412.7	439.4	451.6
55°	343.1	354.4	384.1	410.7	421.9
57.5°	315.4	324.7	355.4	383.0	394.3
60°	285.7	293.9	326.7	356.4	366.6
62.5°	254.0	266.3	300.1	327.7	340.0
65°	225.3	238.6	274.5	301.1	313.4
67.5°	198.7	211.0	245.8	274.5	287.8
70°	168.0	184.3	220.2	248.9	261.2
72.5°	143.4	157.7	194.6	223.3	236.6
75°	114.7	132.1	169.0	197.7	207.9
77.5°	91.1	108.6	143.4	165.9	171.0
80°	66.6	84.0	116.8	128.0	131.1
82.5°	45.1	61.4	84.0	87.1	88.1
85°	27.7	37.9	49.2	49.2	49.2
87.5°	13.3	15.4	17.4	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)