

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: P277388

Luminaire Tested: **22CZ2-20HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277388
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-6500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2219.0 lumens
Efficiency: N/A
Efficacy: 137.1 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

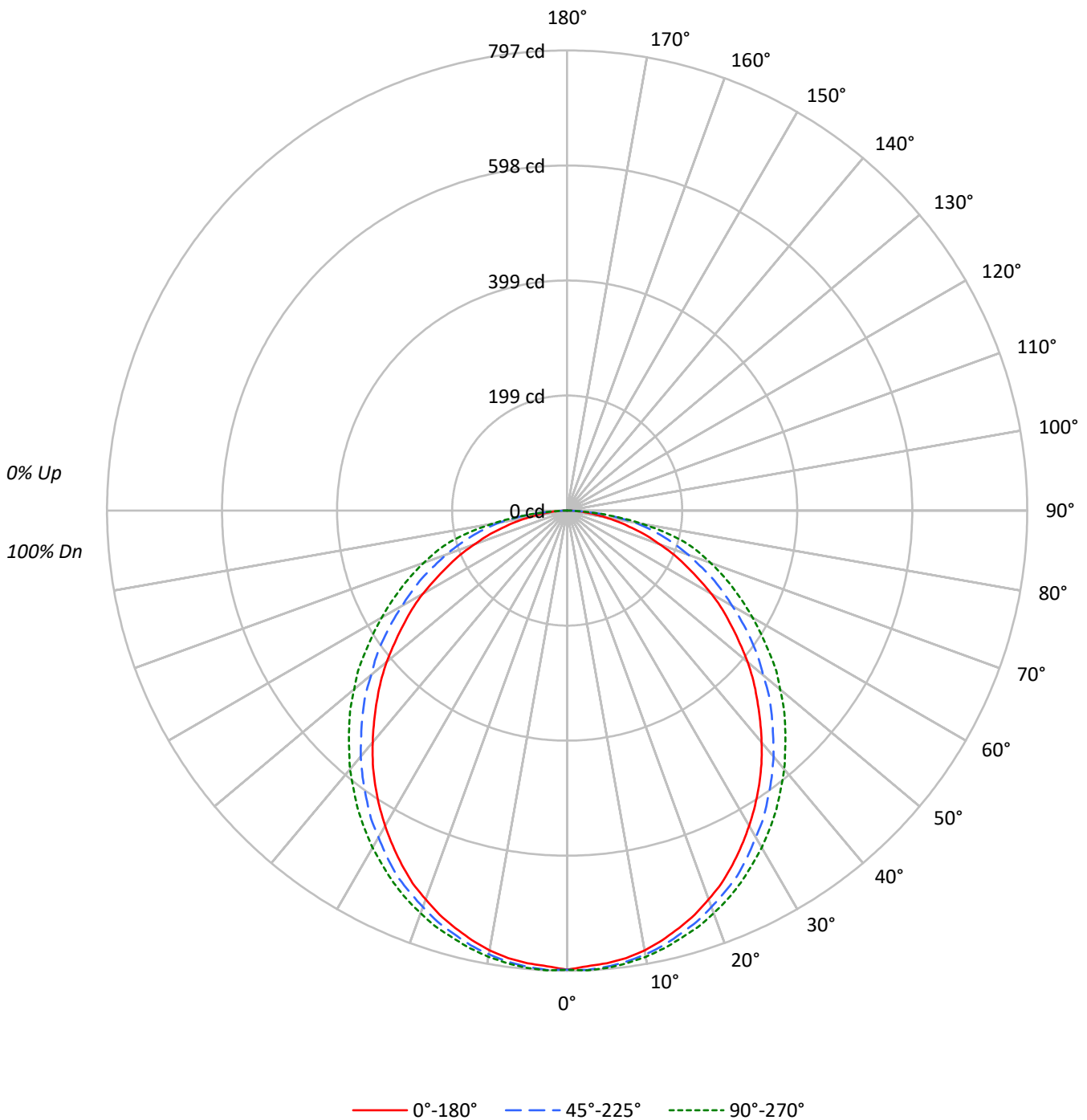
Input Watts (W): 16.182
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2140	2140	2140
5°	2126	2142	2148
10°	2113	2133	2144
15°	2085	2114	2134
20°	2052	2093	2126
25°	2010	2072	2112
30°	1959	2030	2094
35°	1905	1993	2075
40°	1840	1953	2055
45°	1773	1907	2033
50°	1708	1855	2015
55°	1627	1822	2001
60°	1555	1778	1995
65°	1450	1767	2017
70°	1336	1751	2077
75°	1206	1776	2185
80°	1043	1829	2053
85°	865	1535	1535



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.2	3.4
10°-20°	214.0	9.6
20°-30°	320.2	14.4
30°-40°	379.2	17.1
40°-50°	386.4	17.4
50°-60°	346.4	15.6
60°-70°	271.2	12.2
70°-80°	174.8	7.9
80°-90°	51.7	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°	609.4	27.5
0°-40°	988.5	44.5
0°-60°	1721.3	77.6
0°-90°	2219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2219.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	795	795	795	795	795	
5°	787	789	793	794	795	75
15°	748	753	759	765	766	211
25°	677	683	698	707	711	312
35°	580	587	607	625	632	362
45°	466	476	501	527	534	360
55°	347	358	388	415	427	311
65°	228	241	278	304	317	226
75°	116	134	171	200	210	124
85°	28	38	50	50	50	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	795.1	795.1	795.1	795.1	795.1
2.5°	790.0	792.0	796.2	797.2	797.2
5°	786.9	788.9	793.1	794.1	795.1
7.5°	781.7	782.7	787.9	790.0	791.0
10°	773.4	775.5	780.6	783.7	784.8
12.5°	762.0	765.1	771.3	775.5	776.5
15°	748.5	752.7	758.9	765.1	766.1
17.5°	734.1	738.2	746.5	753.7	755.8
20°	716.5	721.6	730.9	739.2	742.3
22.5°	698.9	703.0	714.4	724.7	727.8
25°	677.1	683.3	697.8	707.1	711.3
27.5°	654.3	661.6	676.1	688.5	692.6
30°	630.5	637.8	653.3	668.8	674.0
32.5°	605.7	614.0	632.6	648.1	653.3
35°	579.8	587.0	606.7	625.3	631.6
37.5°	552.9	559.1	581.9	601.5	607.7
40°	523.9	532.2	556.0	578.8	585.0
42.5°	494.9	504.2	528.0	552.9	559.1
45°	465.9	476.3	501.1	527.0	534.2
47.5°	437.9	446.2	474.2	499.0	509.4
50°	407.9	416.2	443.1	471.1	481.4
52.5°	376.9	388.3	417.2	444.2	456.6
55°	346.8	358.2	388.3	415.2	426.6
57.5°	318.9	328.2	359.3	387.2	398.6
60°	288.9	297.1	330.3	360.3	370.6
62.5°	256.8	269.2	303.4	331.3	343.7
65°	227.8	241.2	277.5	304.4	316.8
67.5°	200.9	213.3	248.5	277.5	290.9
70°	169.8	186.4	222.6	251.6	264.0
72.5°	144.9	159.4	196.7	225.7	239.2
75°	116.0	133.6	170.8	199.8	210.2
77.5°	92.1	109.7	144.9	167.7	172.9
80°	67.3	84.9	118.0	129.4	132.5
82.5°	45.6	62.1	84.9	88.0	89.0
85°	28.0	38.3	49.7	49.7	49.7
87.5°	13.5	15.5	17.6	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)