

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: P277216

Luminaire Tested: **22CZ2-20HE-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20HE-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2045.0 lumens
Efficiency: N/A
Efficacy: 129.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

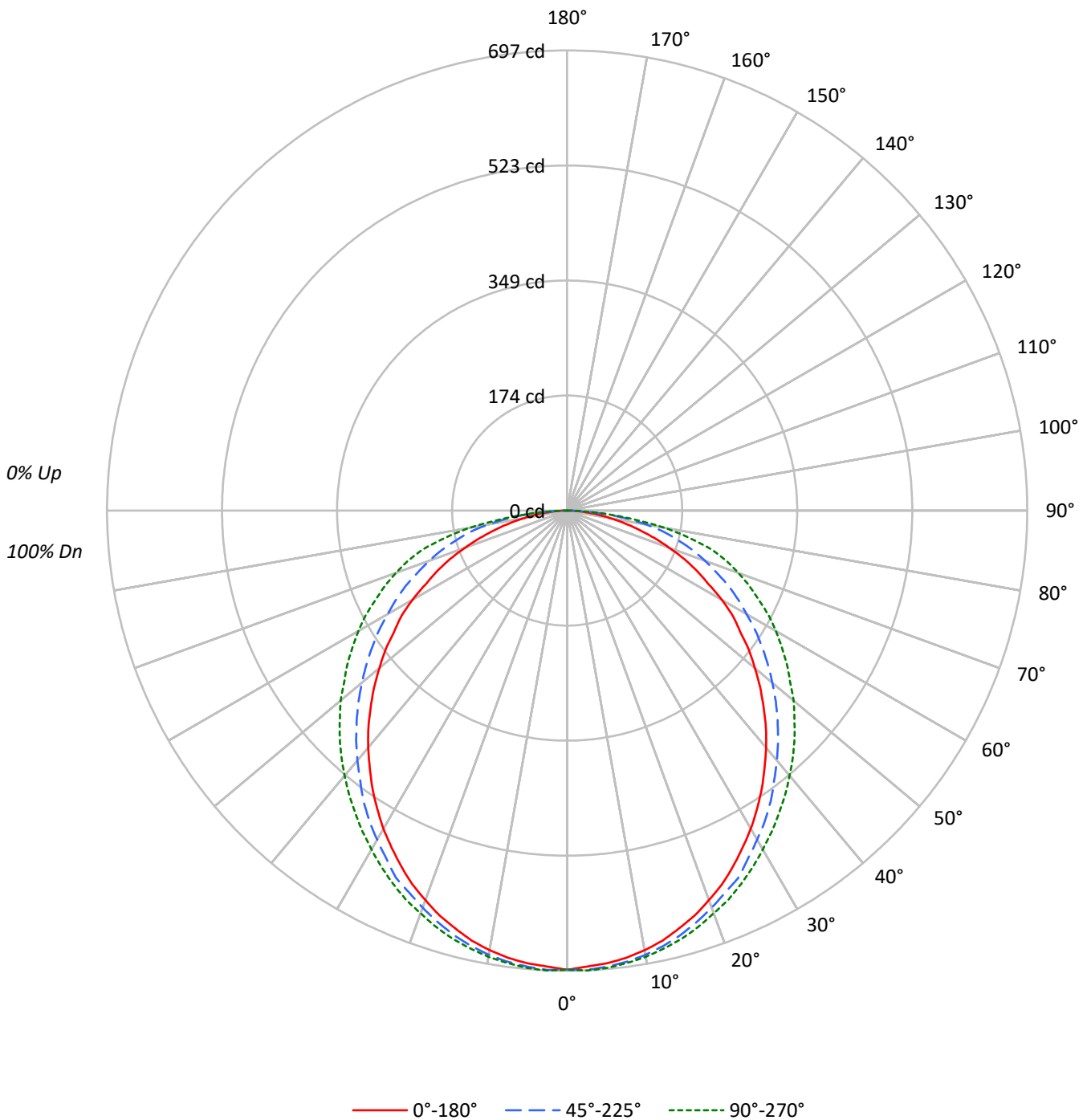
Input Watts (W): 15.81
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1871	1871	1871
5°	1859	1873	1878
10°	1848	1867	1875
15°	1825	1853	1870
20°	1798	1833	1859
25°	1766	1822	1852
30°	1729	1789	1842
35°	1689	1765	1838
40°	1647	1736	1842
45°	1601	1716	1853
50°	1554	1698	1875
55°	1501	1690	1907
60°	1457	1690	1966
65°	1384	1717	2038
70°	1290	1750	2169
75°	1182	1810	2344
80°	1029	1888	2307
85°	902	1677	1834



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	3.2
10°-20°	187.3	9.2
20°-30°	281.2	13.7
30°-40°	336.0	16.4
40°-50°	349.4	17.1
50°-60°	323.8	15.8
60°-70°	265.6	13.0
70°-80°	179.5	8.8
80°-90°	56.4	2.8
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°	534.2	26.1
0°-40°	870.2	42.6
0°-60°	1543.4	75.5
0°-90°	2045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2045.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	688	689	693	694	695	65
15°	655	658	665	669	671	185
25°	595	600	614	621	624	274
35°	514	521	537	554	560	321
45°	421	429	451	477	487	325
55°	320	330	360	392	406	288
65°	217	229	270	305	320	215
75°	114	133	174	209	225	121
85°	29	40	54	60	59	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.3	695.3	695.3	695.3	695.3
2.5°	691.3	693.3	696.3	697.4	697.4
5°	688.3	689.3	693.3	694.3	695.3
7.5°	683.3	685.3	689.3	690.3	691.3
10°	676.2	678.2	683.3	685.3	686.3
12.5°	667.2	669.2	675.2	678.2	679.2
15°	655.1	658.1	665.1	669.2	671.2
17.5°	643.0	646.0	653.1	659.1	661.1
20°	627.9	635.0	640.0	648.0	649.0
22.5°	612.8	616.8	625.9	634.0	638.0
25°	594.7	599.7	613.8	620.9	623.9
27.5°	575.6	582.6	593.7	604.8	608.8
30°	556.5	561.5	575.6	588.7	592.7
32.5°	535.3	542.4	557.5	570.6	576.6
35°	514.2	521.3	537.4	553.5	559.5
37.5°	491.1	499.1	515.2	534.3	542.4
40°	468.9	475.0	494.1	517.2	524.3
42.5°	445.8	452.8	473.0	498.1	506.2
45°	420.6	428.7	450.8	477.0	487.0
47.5°	396.5	404.5	428.7	454.8	466.9
50°	371.3	381.4	405.5	435.7	447.8
52.5°	347.2	356.2	383.4	414.6	425.7
55°	320.0	330.1	360.2	392.4	406.5
57.5°	297.9	304.9	338.1	371.3	385.4
60°	270.7	279.7	314.0	349.2	365.3
62.5°	241.5	256.6	291.8	328.0	344.1
65°	217.4	229.4	269.7	304.9	320.0
67.5°	192.2	205.3	244.5	281.8	298.9
70°	164.0	181.1	222.4	259.6	275.7
72.5°	138.9	157.0	199.2	235.5	252.6
75°	113.7	132.8	174.1	209.3	225.4
77.5°	89.6	110.7	150.9	178.1	188.2
80°	66.4	86.5	121.8	140.9	148.9
82.5°	46.3	63.4	89.6	99.6	101.6
85°	29.2	40.3	54.3	60.4	59.4
87.5°	13.1	16.1	20.1	22.1	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)