

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: P277215

Luminaire Tested: **22CZ2-20HE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277215  
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-4000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2009.0 lumens  
Efficiency: N/A  
Efficacy: 127.8 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

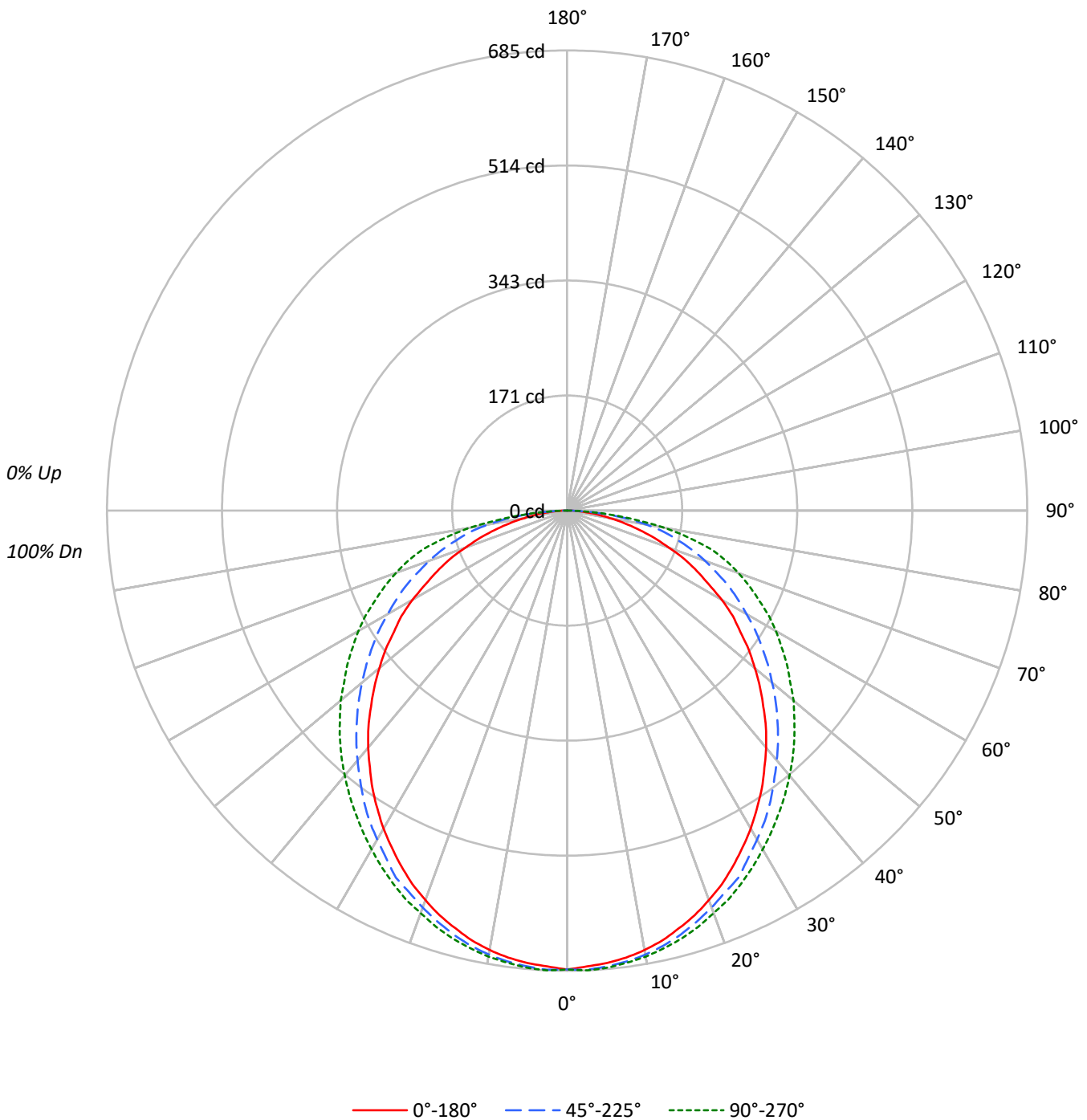
Input Watts (W): 15.717  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1838	1838	1838
5°	1827	1840	1845
10°	1815	1834	1842
15°	1793	1820	1837
20°	1767	1800	1826
25°	1735	1790	1820
30°	1699	1757	1809
35°	1660	1734	1805
40°	1618	1705	1809
45°	1572	1686	1821
50°	1527	1668	1842
55°	1475	1660	1874
60°	1431	1660	1931
65°	1359	1687	2002
70°	1268	1719	2131
75°	1161	1778	2302
80°	1010	1853	2267
85°	886	1649	1800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.6	3.2
10°-20°	184.0	9.2
20°-30°	276.2	13.7
30°-40°	330.1	16.4
40°-50°	343.2	17.1
50°-60°	318.1	15.8
60°-70°	260.9	13.0
70°-80°	176.4	8.8
80°-90°	55.4	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°	524.8	26.1
0°-40°	854.9	42.6
0°-60°	1516.2	75.5
0°-90°	2009.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2009.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	676	677	681	682	683	64
15°	644	646	653	657	659	182
25°	584	589	603	610	613	269
35°	505	512	528	544	550	316
45°	413	421	443	469	478	319
55°	314	324	354	386	399	283
65°	214	225	265	300	314	211
75°	112	130	171	206	221	118
85°	29	40	53	59	58	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	683.1	683.1	683.1	683.1	683.1
2.5°	679.1	681.1	684.1	685.1	685.1
5°	676.2	677.2	681.1	682.1	683.1
7.5°	671.2	673.2	677.2	678.2	679.1
10°	664.3	666.3	671.2	673.2	674.2
12.5°	655.4	657.4	663.3	666.3	667.3
15°	643.6	646.5	653.4	657.4	659.4
17.5°	631.7	634.7	641.6	647.5	649.5
20°	616.9	623.8	628.7	636.6	637.6
22.5°	602.0	606.0	614.9	622.8	626.7
25°	584.2	589.2	603.0	609.9	612.9
27.5°	565.5	572.4	583.3	594.1	598.1
30°	546.7	551.6	565.5	578.3	582.3
32.5°	525.9	532.8	547.7	560.5	566.4
35°	505.2	512.1	527.9	543.7	549.6
37.5°	482.4	490.3	506.1	524.9	532.8
40°	460.7	466.6	485.4	508.1	515.0
42.5°	437.9	444.9	464.6	489.3	497.2
45°	413.2	421.1	442.9	468.6	478.5
47.5°	389.5	397.4	421.1	446.8	458.7
50°	364.8	374.7	398.4	428.0	439.9
52.5°	341.1	350.0	376.6	407.3	418.2
55°	314.4	324.2	353.9	385.5	399.4
57.5°	292.6	299.5	332.2	364.8	378.6
60°	265.9	274.8	308.4	343.0	358.8
62.5°	237.3	252.1	286.7	322.3	338.1
65°	213.5	225.4	264.9	299.5	314.4
67.5°	188.8	201.7	240.2	276.8	293.6
70°	161.1	177.9	218.5	255.0	270.9
72.5°	136.4	154.2	195.7	231.3	248.1
75°	111.7	130.5	171.0	205.6	221.4
77.5°	88.0	108.7	148.3	175.0	184.9
80°	65.2	85.0	119.6	138.4	146.3
82.5°	45.5	62.3	88.0	97.9	99.8
85°	28.7	39.5	53.4	59.3	58.3
87.5°	12.9	15.8	19.8	21.7	20.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)