

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: P277440

Luminaire Tested: **22CZ2-20HE-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277440  
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-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1993.0 lumens  
Efficiency: N/A  
Efficacy: 124.6 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

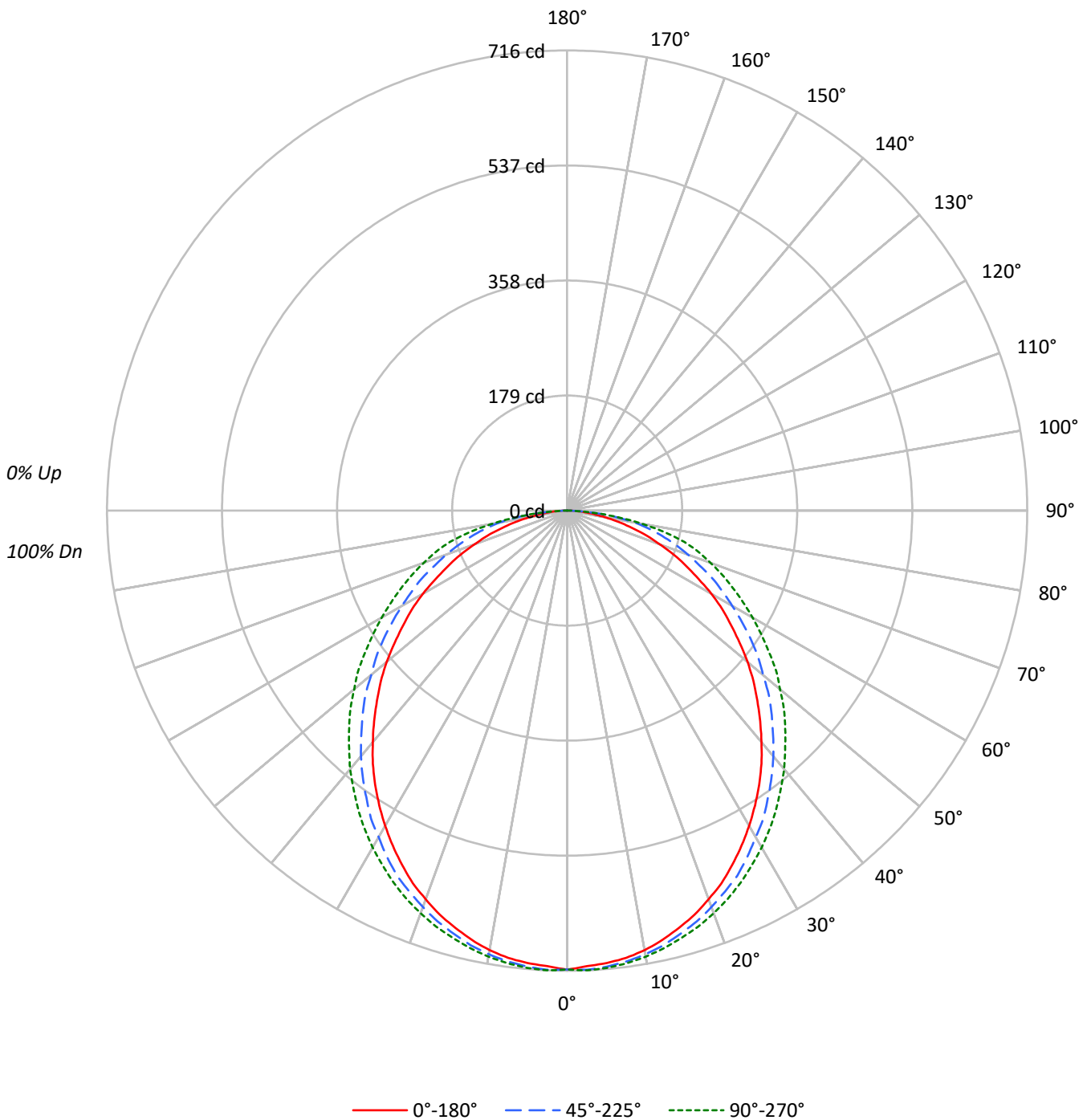
Input Watts (W): 15.996  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1922	1922	1922
5°	1909	1924	1929
10°	1898	1916	1926
15°	1873	1899	1917
20°	1843	1880	1909
25°	1806	1861	1897
30°	1760	1823	1881
35°	1711	1790	1863
40°	1653	1754	1846
45°	1592	1713	1826
50°	1534	1666	1810
55°	1461	1636	1797
60°	1396	1596	1792
65°	1303	1587	1812
70°	1200	1573	1865
75°	1082	1595	1963
80°	936	1643	1844
85°	775	1377	1377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.5	3.4
10°-20°	192.2	9.6
20°-30°	287.6	14.4
30°-40°	340.6	17.1
40°-50°	347.1	17.4
50°-60°	311.1	15.6
60°-70°	243.6	12.2
70°-80°	157.1	7.9
80°-90°	46.4	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°	547.3	27.5
0°-40°	887.9	44.5
0°-60°	1546.0	77.6
0°-90°	1993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1993.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	707	709	712	713	714	67
15°	672	676	682	687	688	190
25°	608	614	627	635	639	280
35°	521	527	545	562	567	325
45°	418	428	450	473	480	323
55°	312	322	349	373	383	279
65°	205	217	249	273	284	203
75°	104	120	153	180	189	112
85°	25	34	45	45	45	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	714.2	714.2	714.2	714.2	714.2
2.5°	709.5	711.4	715.1	716.0	716.0
5°	706.7	708.6	712.3	713.2	714.2
7.5°	702.1	703.0	707.6	709.5	710.4
10°	694.6	696.5	701.1	703.9	704.9
12.5°	684.4	687.2	692.8	696.5	697.4
15°	672.3	676.0	681.6	687.2	688.1
17.5°	659.3	663.0	670.4	677.0	678.8
20°	643.5	648.1	656.5	663.9	666.7
22.5°	627.7	631.4	641.6	650.9	653.7
25°	608.1	613.7	626.7	635.1	638.8
27.5°	587.7	594.2	607.2	618.4	622.1
30°	566.3	572.8	586.8	600.7	605.4
32.5°	544.0	551.4	568.2	582.1	586.8
35°	520.7	527.2	544.9	561.7	567.2
37.5°	496.6	502.1	522.6	540.3	545.8
40°	470.5	478.0	499.3	519.8	525.4
42.5°	444.5	452.9	474.2	496.6	502.1
45°	418.4	427.7	450.1	473.3	479.8
47.5°	393.3	400.8	425.9	448.2	457.5
50°	366.4	373.8	398.0	423.1	432.4
52.5°	338.5	348.7	374.7	398.9	410.1
55°	311.5	321.7	348.7	372.9	383.1
57.5°	286.4	294.8	322.7	347.8	358.0
60°	259.4	266.9	296.6	323.6	332.9
62.5°	230.6	241.8	272.5	297.6	308.7
65°	204.6	216.7	249.2	273.4	284.5
67.5°	180.4	191.6	223.2	249.2	261.3
70°	152.5	167.4	199.9	226.0	237.1
72.5°	130.2	143.2	176.7	202.7	214.8
75°	104.1	120.0	153.4	179.5	188.8
77.5°	82.8	98.6	130.2	150.6	155.3
80°	60.4	76.3	106.0	116.2	119.0
82.5°	40.9	55.8	76.3	79.0	80.0
85°	25.1	34.4	44.6	44.6	44.6
87.5°	12.1	13.9	15.8	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)