

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: P277439

Luminaire Tested: **22CZ2-20HE-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277439  
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-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1963.0 lumens  
Efficiency: N/A  
Efficacy: 123.4 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

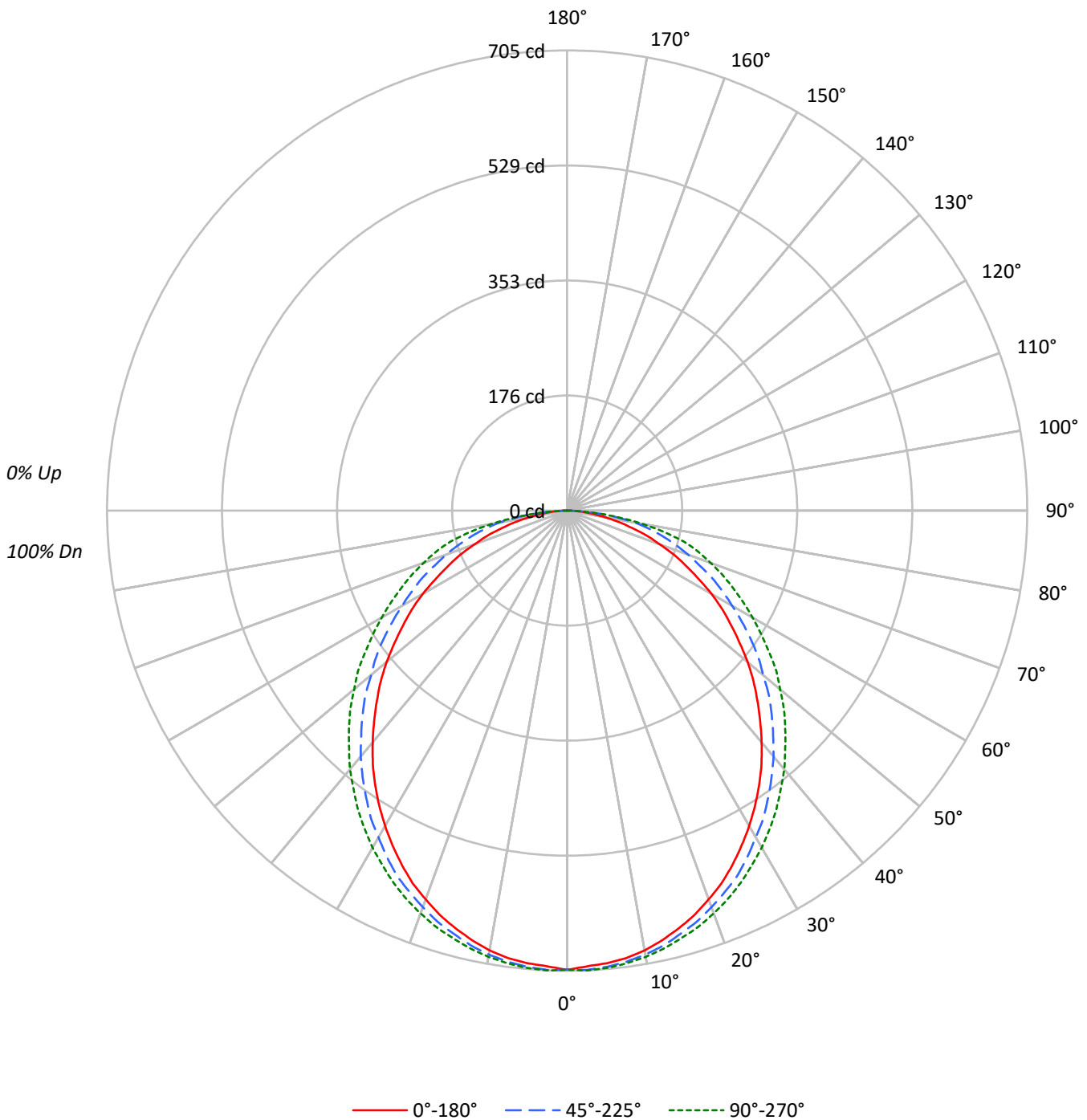
Input Watts (W): 15.903  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1893	1893	1893
5°	1880	1895	1900
10°	1870	1887	1897
15°	1845	1870	1888
20°	1815	1852	1881
25°	1779	1833	1868
30°	1733	1796	1853
35°	1685	1763	1835
40°	1628	1728	1818
45°	1569	1687	1799
50°	1511	1641	1783
55°	1439	1612	1770
60°	1375	1573	1765
65°	1283	1563	1785
70°	1182	1549	1838
75°	1067	1571	1933
80°	922	1618	1816
85°	763	1359	1359



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.5	3.4
10°-20°	189.3	9.6
20°-30°	283.2	14.4
30°-40°	335.4	17.1
40°-50°	341.8	17.4
50°-60°	306.4	15.6
60°-70°	239.9	12.2
70°-80°	154.7	7.9
80°-90°	45.7	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°	539.1	27.5
0°-40°	874.5	44.5
0°-60°	1522.7	77.6
0°-90°	1963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1963.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	696	698	702	702	703	66
15°	662	666	671	677	678	187
25°	599	604	617	626	629	276
35°	513	519	537	553	559	321
45°	412	421	443	466	473	318
55°	307	317	344	367	377	275
65°	202	213	246	269	280	200
75°	103	118	151	177	186	110
85°	25	34	44	44	44	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	703.4	703.4	703.4	703.4	703.4
2.5°	698.8	700.7	704.3	705.2	705.2
5°	696.1	697.9	701.6	702.5	703.4
7.5°	691.5	692.4	697.0	698.8	699.7
10°	684.2	686.0	690.6	693.3	694.2
12.5°	674.1	676.8	682.3	686.0	686.9
15°	662.2	665.9	671.3	676.8	677.8
17.5°	649.4	653.0	660.4	666.8	668.6
20°	633.8	638.4	646.6	653.9	656.7
22.5°	618.2	621.9	632.0	641.1	643.9
25°	599.0	604.5	617.3	625.6	629.2
27.5°	578.8	585.3	598.1	609.1	612.7
30°	557.8	564.2	577.9	591.7	596.2
32.5°	535.8	543.1	559.6	573.3	577.9
35°	512.9	519.3	536.7	553.2	558.7
37.5°	489.1	494.6	514.7	532.1	537.6
40°	463.4	470.8	491.8	512.0	517.5
42.5°	437.8	446.0	467.1	489.1	494.6
45°	412.2	421.3	443.3	466.2	472.6
47.5°	387.4	394.7	419.5	441.5	450.6
50°	360.9	368.2	392.0	416.7	425.9
52.5°	333.4	343.5	369.1	392.9	403.9
55°	306.8	316.9	343.5	367.3	377.3
57.5°	282.1	290.3	317.8	342.5	352.6
60°	255.5	262.9	292.2	318.7	327.9
62.5°	227.1	238.1	268.4	293.1	304.1
65°	201.5	213.4	245.5	269.3	280.3
67.5°	177.7	188.7	219.8	245.5	257.4
70°	150.2	164.9	196.9	222.6	233.6
72.5°	128.2	141.0	174.0	199.7	211.6
75°	102.6	118.1	151.1	176.8	185.9
77.5°	81.5	97.1	128.2	148.4	153.0
80°	59.5	75.1	104.4	114.5	117.2
82.5°	40.3	55.0	75.1	77.9	78.8
85°	24.7	33.9	44.0	44.0	44.0
87.5°	11.9	13.7	15.6	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)