

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: P277320

Luminaire Tested: **22CZ2-20HE-S-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277320
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-L83050-W2A1-U-3000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2006.0 lumens
Efficiency: N/A
Efficacy: 129.2 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

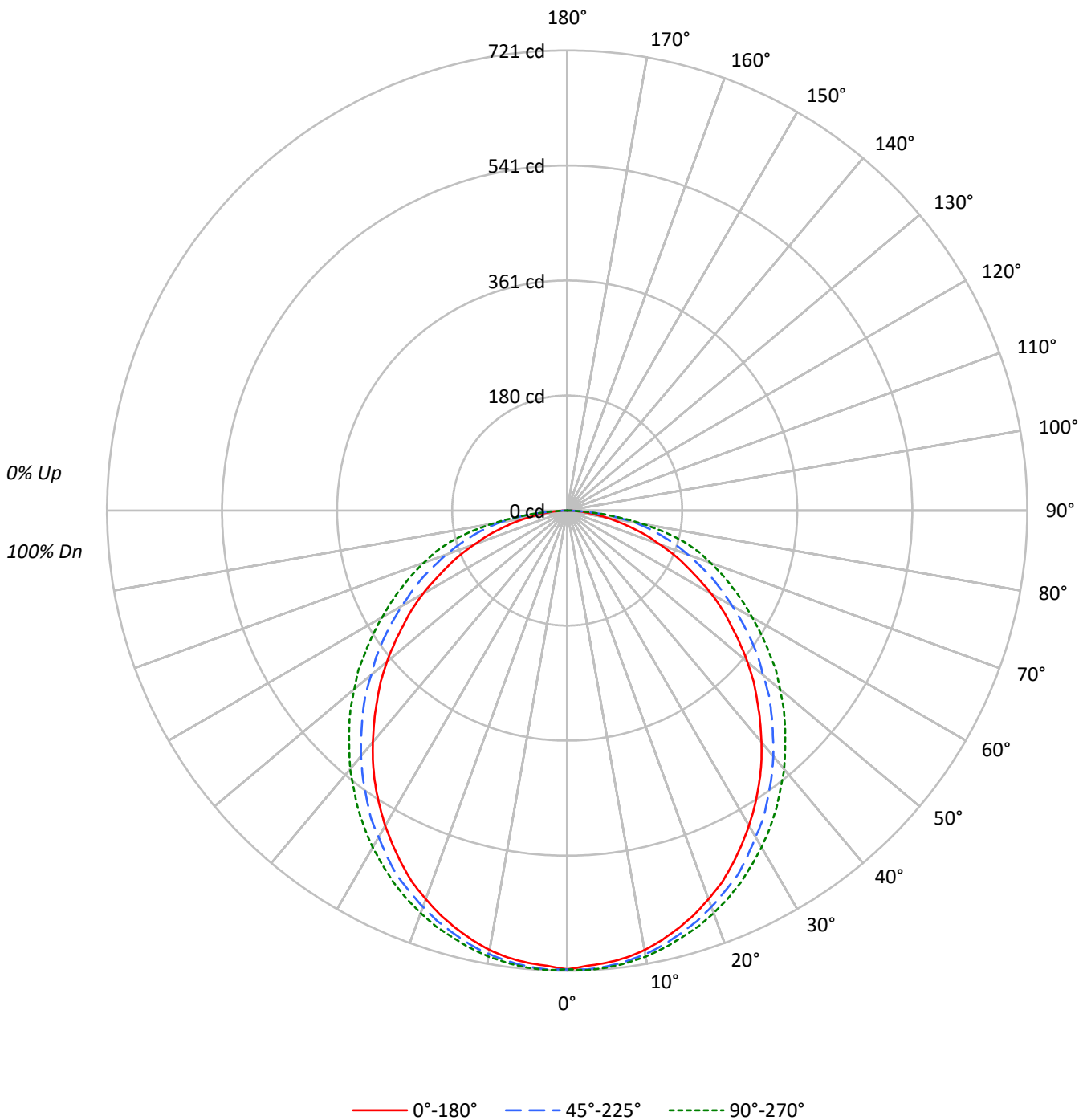
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1934	1934	1934
5°	1921	1937	1942
10°	1911	1928	1939
15°	1885	1911	1930
20°	1855	1892	1922
25°	1817	1873	1909
30°	1771	1835	1893
35°	1722	1802	1875
40°	1664	1766	1858
45°	1603	1724	1838
50°	1544	1677	1822
55°	1471	1647	1809
60°	1405	1607	1803
65°	1311	1597	1824
70°	1208	1583	1878
75°	1090	1605	1975
80°	942	1654	1857
85°	781	1386	1386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.0	3.4
10°-20°	193.5	9.6
20°-30°	289.5	14.4
30°-40°	342.8	17.1
40°-50°	349.3	17.4
50°-60°	313.1	15.6
60°-70°	245.1	12.2
70°-80°	158.0	7.9
80°-90°	46.7	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°	550.9	27.5
0°-40°	893.7	44.6
0°-60°	1556.1	77.6
0°-90°	2006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	711	713	717	718	719	68
15°	677	680	686	692	693	191
25°	612	618	631	639	643	282
35°	524	531	548	565	571	328
45°	421	430	453	476	483	325
55°	314	324	351	375	386	281
65°	206	218	251	275	286	205
75°	105	121	154	181	190	112
85°	25	35	45	45	45	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	718.8	718.8	718.8	718.8	718.8
2.5°	714.1	716.0	719.7	720.7	720.7
5°	711.3	713.2	716.9	717.9	718.8
7.5°	706.6	707.6	712.3	714.1	715.1
10°	699.2	701.0	705.7	708.5	709.5
12.5°	688.9	691.7	697.3	701.0	702.0
15°	676.7	680.4	686.1	691.7	692.6
17.5°	663.6	667.3	674.8	681.4	683.2
20°	647.7	652.4	660.8	668.3	671.1
22.5°	631.8	635.5	645.8	655.2	658.0
25°	612.1	617.7	630.8	639.3	643.0
27.5°	591.5	598.1	611.2	622.4	626.2
30°	570.0	576.5	590.6	604.6	609.3
32.5°	547.5	555.0	571.9	585.9	590.6
35°	524.1	530.7	548.5	565.3	570.9
37.5°	499.8	505.4	526.0	543.8	549.4
40°	473.6	481.1	502.6	523.2	528.8
42.5°	447.4	455.8	477.3	499.8	505.4
45°	421.2	430.5	453.0	476.4	483.0
47.5°	395.9	403.4	428.7	451.1	460.5
50°	368.8	376.3	400.6	425.9	435.2
52.5°	340.7	351.0	377.2	401.5	412.8
55°	313.5	323.8	351.0	375.3	385.6
57.5°	288.3	296.7	324.8	350.0	360.3
60°	261.1	268.6	298.6	325.7	335.1
62.5°	232.1	243.3	274.2	299.5	310.7
65°	205.9	218.1	250.8	275.2	286.4
67.5°	181.6	192.8	224.6	250.8	263.0
70°	153.5	168.5	201.2	227.4	238.7
72.5°	131.0	144.1	177.8	204.0	216.2
75°	104.8	120.7	154.4	180.6	190.0
77.5°	83.3	99.2	131.0	151.6	156.3
80°	60.8	76.7	106.7	117.0	119.8
82.5°	41.2	56.2	76.7	79.6	80.5
85°	25.3	34.6	44.9	44.9	44.9
87.5°	12.2	14.0	15.9	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)