

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: P277321

Luminaire Tested: **22CZ2-20HE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277321
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-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2123.0 lumens
Efficiency: N/A
Efficacy: 136.7 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

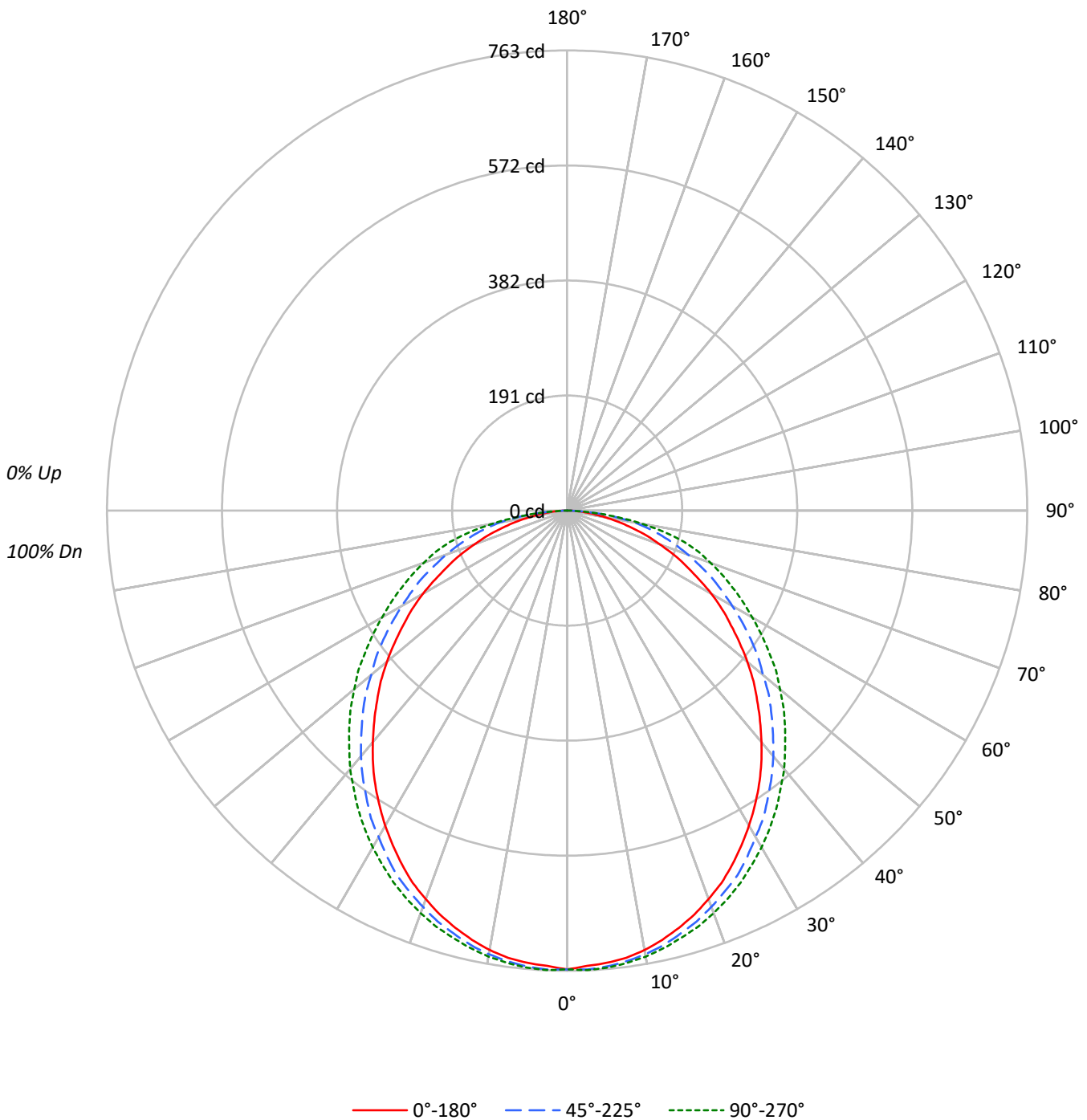
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2047	2047	2047
5°	2034	2050	2055
10°	2022	2041	2052
15°	1995	2023	2042
20°	1963	2003	2034
25°	1923	1982	2021
30°	1874	1942	2004
35°	1822	1907	1985
40°	1761	1868	1966
45°	1696	1824	1945
50°	1634	1775	1928
55°	1557	1743	1915
60°	1488	1701	1908
65°	1387	1691	1930
70°	1278	1676	1987
75°	1153	1699	2091
80°	998	1750	1965
85°	824	1467	1467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.9	3.4
10°-20°	204.7	9.6
20°-30°	306.3	14.4
30°-40°	362.8	17.1
40°-50°	369.7	17.4
50°-60°	331.4	15.6
60°-70°	259.4	12.2
70°-80°	167.3	7.9
80°-90°	49.4	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°	583.0	27.5
0°-40°	945.8	44.5
0°-60°	1646.9	77.6
0°-90°	2123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2123.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	753	755	759	760	761	71
15°	716	720	726	732	733	202
25°	648	654	668	676	680	298
35°	555	562	580	598	604	347
45°	446	456	479	504	511	344
55°	332	343	372	397	408	298
65°	218	231	266	291	303	216
75°	111	128	163	191	201	119
85°	27	37	48	48	48	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.7	760.7	760.7	760.7	760.7
2.5°	755.8	757.8	761.7	762.7	762.7
5°	752.8	754.8	758.8	759.7	760.7
7.5°	747.9	748.9	753.8	755.8	756.8
10°	739.9	741.9	746.9	749.8	750.8
12.5°	729.0	732.0	738.0	741.9	742.9
15°	716.2	720.1	726.1	732.0	733.0
17.5°	702.3	706.3	714.2	721.1	723.1
20°	685.5	690.4	699.3	707.2	710.2
22.5°	668.6	672.6	683.5	693.4	696.4
25°	647.8	653.8	667.6	676.5	680.5
27.5°	626.0	633.0	646.8	658.7	662.7
30°	603.2	610.2	625.0	639.9	644.8
32.5°	579.5	587.4	605.2	620.1	625.0
35°	554.7	561.6	580.5	598.3	604.2
37.5°	529.0	534.9	556.7	575.5	581.4
40°	501.2	509.1	531.9	553.7	559.7
42.5°	473.5	482.4	505.2	529.0	534.9
45°	445.7	455.6	479.4	504.2	511.1
47.5°	419.0	426.9	453.7	477.4	487.3
50°	390.3	398.2	424.0	450.7	460.6
52.5°	360.6	371.5	399.2	424.9	436.8
55°	331.8	342.7	371.5	397.2	408.1
57.5°	305.1	314.0	343.7	370.5	381.4
60°	276.4	284.3	316.0	344.7	354.6
62.5°	245.7	257.5	290.2	317.0	328.9
65°	217.9	230.8	265.5	291.2	303.1
67.5°	192.2	204.1	237.7	265.5	278.3
70°	162.4	178.3	213.0	240.7	252.6
72.5°	138.7	152.5	188.2	215.9	228.8
75°	110.9	127.8	163.4	191.2	201.1
77.5°	88.2	105.0	138.7	160.5	165.4
80°	64.4	81.2	112.9	123.8	126.8
82.5°	43.6	59.4	81.2	84.2	85.2
85°	26.7	36.7	47.5	47.5	47.5
87.5°	12.9	14.9	16.8	15.8	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)