

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: P277357

Luminaire Tested: **22CZ2-24HE-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277357
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: 22CZ2-24HE-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2199.0 lumens
Efficiency: N/A
Efficacy: 121.9 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

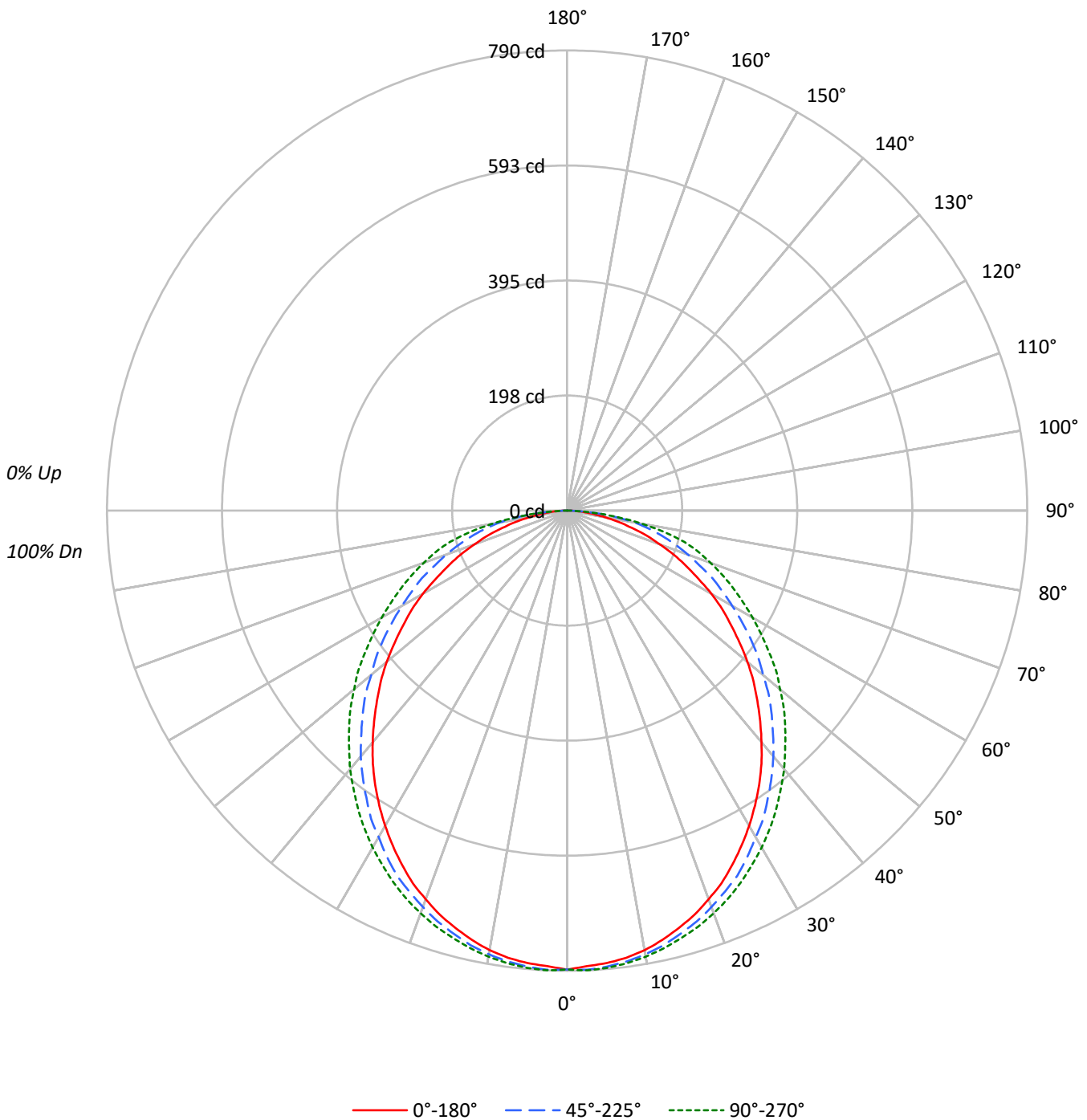
Input Watts (W): 18.034002
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2120	2120	2120
5°	2106	2123	2129
10°	2094	2114	2125
15°	2067	2095	2115
20°	2033	2074	2107
25°	1992	2053	2093
30°	1941	2012	2075
35°	1888	1975	2056
40°	1824	1936	2036
45°	1757	1890	2015
50°	1692	1838	1997
55°	1612	1805	1983
60°	1541	1762	1977
65°	1437	1751	1999
70°	1324	1736	2058
75°	1195	1760	2166
80°	1034	1813	2035
85°	855	1519	1519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.5	3.4
10°-20°	212.1	9.6
20°-30°	317.3	14.4
30°-40°	375.8	17.1
40°-50°	382.9	17.4
50°-60°	343.2	15.6
60°-70°	268.7	12.2
70°-80°	173.3	7.9
80°-90°	51.2	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°	603.9	27.5
0°-40°	979.6	44.5
0°-60°	1705.8	77.6
0°-90°	2199.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	780	782	786	787	788	74
15°	742	746	752	758	759	209
25°	671	677	692	701	705	309
35°	575	582	601	620	626	359
45°	462	472	497	522	529	357
55°	344	355	385	411	423	308
65°	226	239	275	302	314	224
75°	115	132	169	198	208	123
85°	28	38	49	49	49	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	788.0	788.0	788.0	788.0	788.0
2.5°	782.8	784.9	789.0	790.0	790.0
5°	779.8	781.8	785.9	786.9	788.0
7.5°	774.6	775.7	780.8	782.8	783.9
10°	766.4	768.5	773.6	776.7	777.7
12.5°	755.1	758.2	764.4	768.5	769.5
15°	741.8	745.9	752.1	758.2	759.2
17.5°	727.4	731.5	739.7	746.9	749.0
20°	710.0	715.1	724.4	732.6	735.6
22.5°	692.6	696.7	707.9	718.2	721.3
25°	671.0	677.2	691.5	700.8	704.9
27.5°	648.4	655.6	670.0	682.3	686.4
30°	624.8	632.0	647.4	662.8	667.9
32.5°	600.2	608.4	626.9	642.3	647.4
35°	574.6	581.7	601.2	619.7	625.9
37.5°	547.9	554.0	576.6	596.1	602.3
40°	519.2	527.4	551.0	573.5	579.7
42.5°	490.4	499.7	523.3	547.9	554.0
45°	461.7	472.0	496.6	522.2	529.4
47.5°	434.0	442.2	469.9	494.5	504.8
50°	404.2	412.5	439.1	466.8	477.1
52.5°	373.5	384.8	413.5	440.2	452.5
55°	343.7	355.0	384.8	411.4	422.7
57.5°	316.0	325.2	356.0	383.7	395.0
60°	286.3	294.5	327.3	357.0	367.3
62.5°	254.4	266.8	300.6	328.3	340.6
65°	225.7	239.1	275.0	301.6	314.0
67.5°	199.0	211.4	246.2	275.0	288.3
70°	168.3	184.7	220.6	249.3	261.6
72.5°	143.6	158.0	194.9	223.7	237.0
75°	114.9	132.4	169.3	198.0	208.3
77.5°	91.3	108.8	143.6	166.2	171.3
80°	66.7	84.1	117.0	128.3	131.3
82.5°	45.1	61.6	84.1	87.2	88.2
85°	27.7	38.0	49.2	49.2	49.2
87.5°	13.3	15.4	17.4	16.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)