

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: P277359

Luminaire Tested: **22CZ2-24HE-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277359
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-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: 2237.0 lumens
Efficiency: N/A
Efficacy: 122.1 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

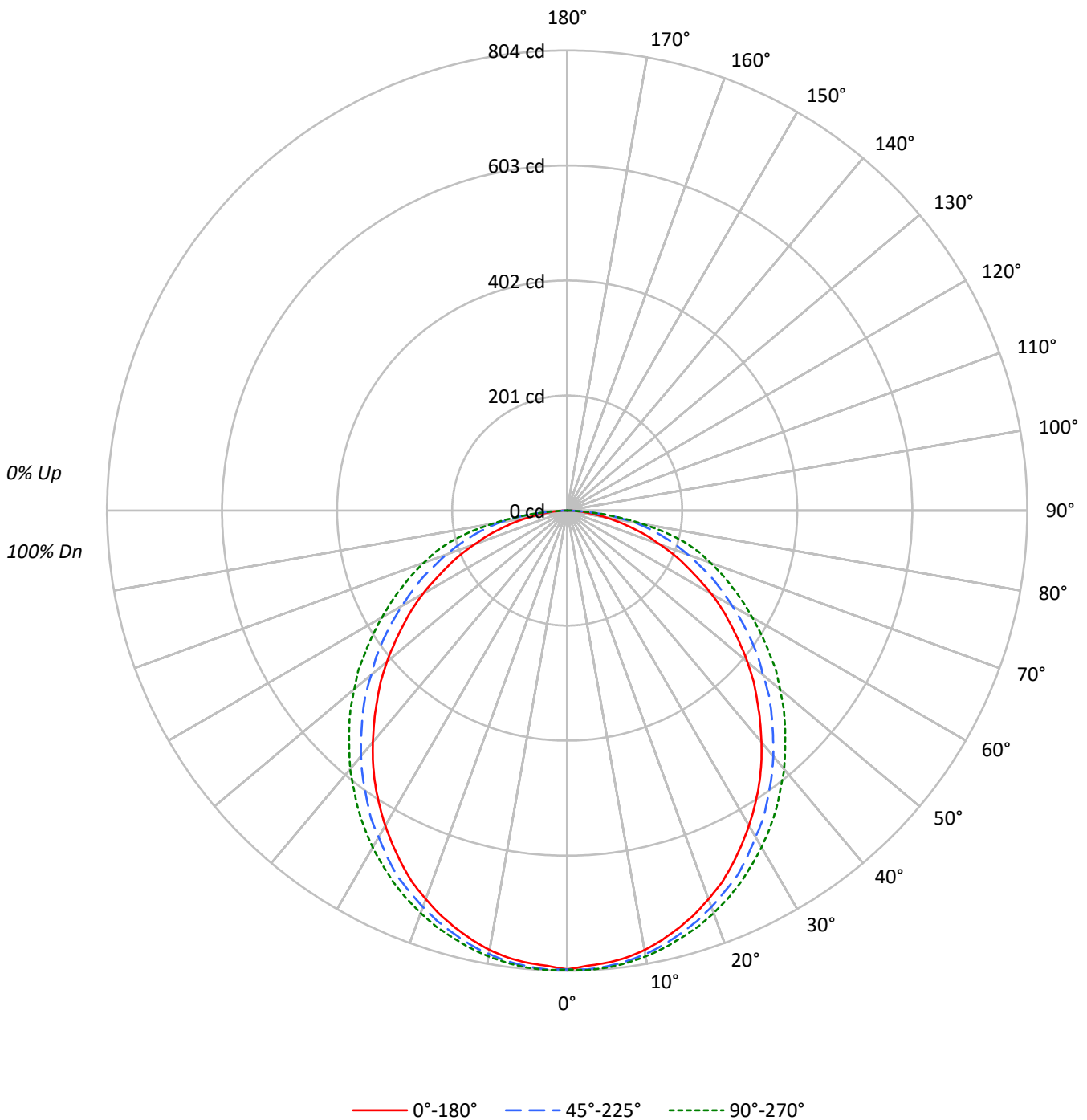
Input Watts (W): 18.315234
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2157	2157	2157
5°	2143	2160	2165
10°	2131	2150	2162
15°	2102	2131	2152
20°	2068	2110	2143
25°	2027	2089	2129
30°	1975	2046	2111
35°	1920	2009	2092
40°	1855	1969	2072
45°	1787	1923	2050
50°	1721	1870	2032
55°	1641	1836	2017
60°	1567	1792	2011
65°	1462	1781	2034
70°	1347	1766	2094
75°	1215	1790	2203
80°	1051	1844	2070
85°	871	1547	1547



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	3.4
10°-20°	215.7	9.6
20°-30°	322.8	14.4
30°-40°	382.3	17.1
40°-50°	389.6	17.4
50°-60°	349.2	15.6
60°-70°	273.4	12.2
70°-80°	176.3	7.9
80°-90°	52.1	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°	614.3	27.5
0°-40°	996.6	44.5
0°-60°	1735.3	77.6
0°-90°	2237.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2237.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	802	802	802	802	802	
5°	793	795	800	800	802	75
15°	755	759	765	771	772	213
25°	683	689	704	713	717	314
35°	584	592	612	630	637	365
45°	470	480	505	531	539	363
55°	350	361	391	418	430	314
65°	230	243	280	307	319	228
75°	117	135	172	201	212	125
85°	28	39	50	50	50	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	801.6	801.6	801.6	801.6	801.6
2.5°	796.4	798.5	802.6	803.7	803.7
5°	793.2	795.3	799.5	800.5	801.6
7.5°	788.0	789.1	794.3	796.4	797.4
10°	779.7	781.8	787.0	790.1	791.1
12.5°	768.2	771.3	777.6	781.8	782.8
15°	754.6	758.8	765.1	771.3	772.4
17.5°	740.0	744.2	752.5	759.8	761.9
20°	722.3	727.5	736.9	745.2	748.4
22.5°	704.5	708.7	720.2	730.6	733.7
25°	682.6	688.9	703.5	712.9	717.0
27.5°	659.6	666.9	681.6	694.1	698.3
30°	635.6	642.9	658.6	674.3	679.5
32.5°	610.6	618.9	637.7	653.4	658.6
35°	584.5	591.8	611.6	630.4	636.7
37.5°	557.4	563.6	586.6	606.4	612.7
40°	528.1	536.5	560.5	583.4	589.7
42.5°	498.9	508.3	532.3	557.4	563.6
45°	469.7	480.1	505.2	531.3	538.6
47.5°	441.5	449.8	478.0	503.1	513.5
50°	411.2	419.6	446.7	474.9	485.3
52.5°	379.9	391.4	420.6	447.8	460.3
55°	349.7	361.1	391.4	418.5	430.0
57.5°	321.5	330.9	362.2	390.4	401.8
60°	291.2	299.6	333.0	363.2	373.7
62.5°	258.8	271.4	305.8	334.0	346.5
65°	229.6	243.2	279.7	306.9	319.4
67.5°	202.5	215.0	250.5	279.7	293.3
70°	171.2	187.9	224.4	253.6	266.2
72.5°	146.1	160.7	198.3	227.5	241.1
75°	116.9	134.6	172.2	201.4	211.9
77.5°	92.9	110.6	146.1	169.1	174.3
80°	67.8	85.6	119.0	130.5	133.6
82.5°	45.9	62.6	85.6	88.7	89.8
85°	28.2	38.6	50.1	50.1	50.1
87.5°	13.6	15.7	17.7	16.7	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)