

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: P259377

Luminaire Tested: **22CZ-LD5-20-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259377
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-20-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2203.0 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

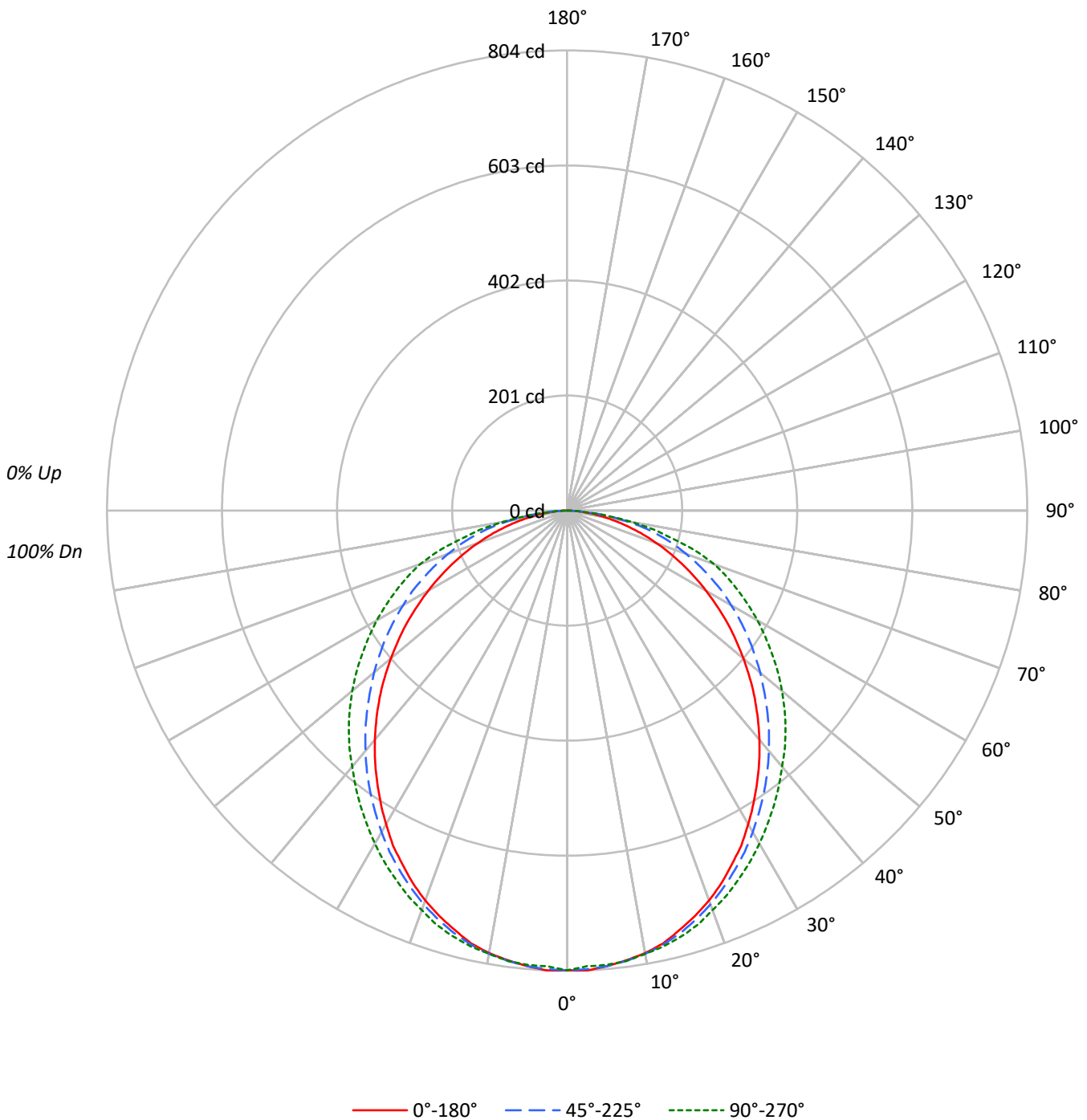
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2161	2161	2161
5°	2158	2158	2152
10°	2145	2148	2148
15°	2114	2128	2146
20°	2076	2097	2127
25°	2023	2058	2108
30°	1966	2015	2088
35°	1901	1971	2068
40°	1836	1925	2052
45°	1764	1880	2054
50°	1683	1843	2051
55°	1604	1812	2050
60°	1509	1783	2067
65°	1415	1759	2096
70°	1307	1740	2148
75°	1177	1727	1991
80°	1034	1607	1739
85°	849	1210	1078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	3.4
10°-20°	215.4	9.8
20°-30°	320.0	14.5
30°-40°	376.7	17.1
40°-50°	384.0	17.4
50°-60°	346.3	15.7
60°-70°	272.8	12.4
70°-80°	168.3	7.6
80°-90°	43.7	2.0
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°	611.3	27.7
0°-40°	987.9	44.8
0°-60°	1718.2	78.0
0°-90°	2203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	803	803	803	803	803	
5°	799	800	799	798	797	76
15°	759	762	764	768	770	214
25°	681	686	693	705	710	314
35°	579	585	600	619	630	362
45°	464	471	494	524	540	357
55°	342	353	386	421	437	305
65°	222	238	276	311	329	220
75°	113	132	166	185	192	121
85°	28	35	39	37	35	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	803.1	803.1	803.1	803.1	803.1
2.5°	804.2	804.2	802.1	799.9	796.8
5°	798.9	799.9	798.9	797.8	796.8
7.5°	792.5	793.6	793.6	793.6	793.6
10°	785.1	786.2	786.2	786.2	786.2
12.5°	774.6	775.6	776.7	777.7	779.8
15°	758.7	761.9	764.0	768.2	770.3
17.5°	742.8	746.0	749.2	754.4	758.7
20°	724.8	726.9	732.2	738.6	742.8
22.5°	704.7	707.9	713.2	721.6	728.0
25°	681.4	685.7	693.1	704.7	710.0
27.5°	659.2	662.4	671.9	684.6	692.0
30°	632.8	637.0	648.6	664.5	671.9
32.5°	606.3	611.6	624.3	642.3	650.8
35°	578.8	585.1	600.0	619.0	629.6
37.5°	551.3	557.6	574.6	595.7	607.4
40°	522.7	529.1	548.1	571.4	584.1
42.5°	493.1	500.5	521.7	548.1	562.9
45°	463.5	470.9	494.1	523.8	539.6
47.5°	432.8	441.2	466.6	499.4	515.3
50°	402.1	411.6	440.2	474.0	489.9
52.5°	371.4	382.0	412.7	447.6	464.5
55°	341.8	353.4	386.2	421.1	437.0
57.5°	310.0	323.8	358.7	392.6	410.6
60°	280.4	295.2	331.2	365.1	384.1
62.5°	250.8	266.6	304.7	338.6	356.6
65°	222.2	238.1	276.2	311.1	329.1
67.5°	193.6	211.6	248.7	283.6	301.6
70°	166.1	185.2	221.2	255.0	273.0
72.5°	139.7	158.7	194.7	226.4	237.0
75°	113.2	132.3	166.1	185.2	191.5
77.5°	88.9	106.9	136.5	148.1	156.6
80°	66.7	82.5	103.7	111.1	112.2
82.5°	45.5	59.3	72.0	73.0	72.0
85°	27.5	34.9	39.2	37.0	34.9
87.5°	12.7	13.8	12.7	8.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)