

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: P277380

Luminaire Tested: **22CZ2-20HE-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277380
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-L82765-W2A1-U-2700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1948.0 lumens
Efficiency: N/A
Efficacy: 125.4 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

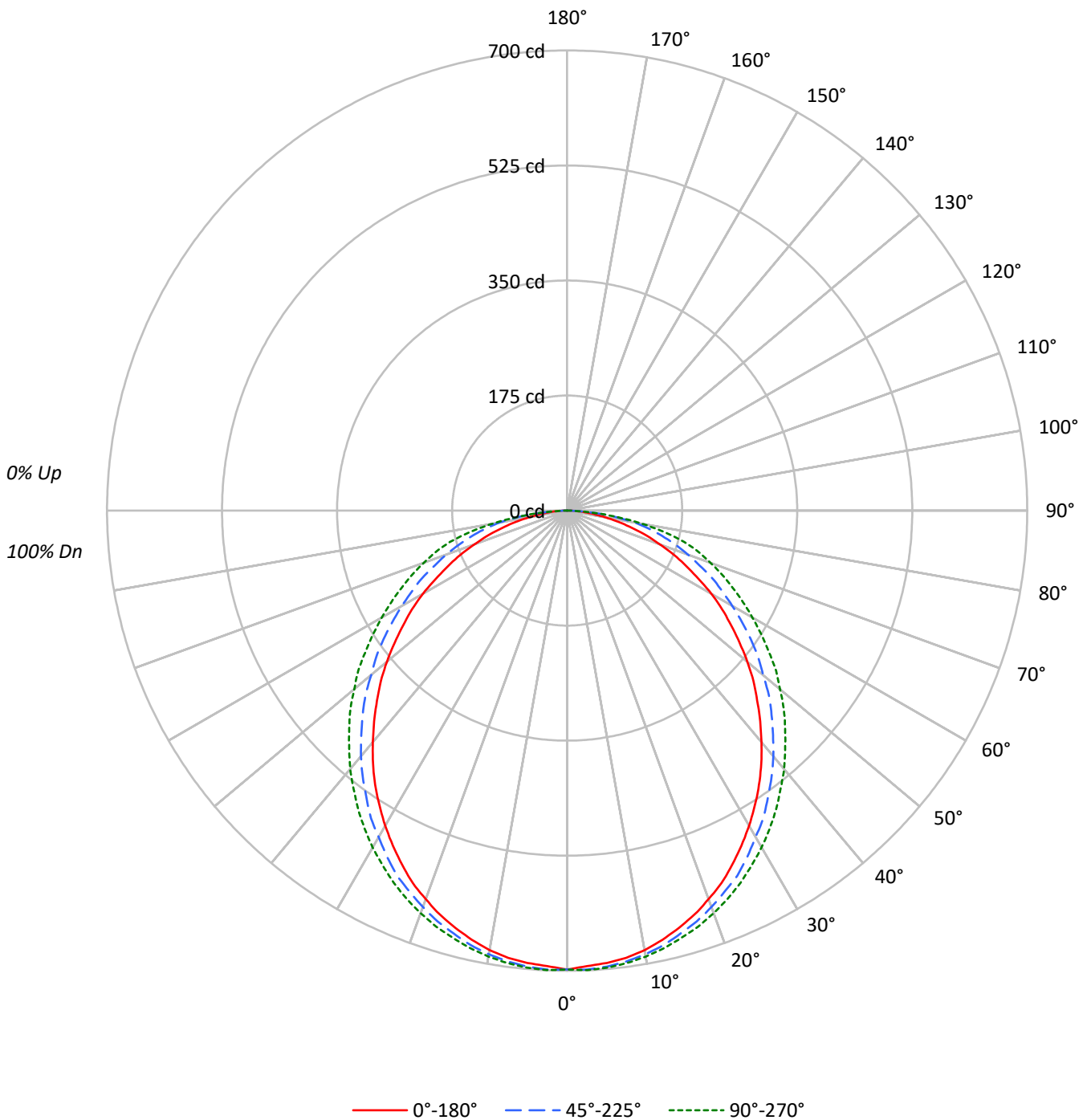
Input Watts (W): 15.531
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1878	1878	1878
5°	1866	1881	1885
10°	1855	1873	1882
15°	1831	1856	1874
20°	1801	1838	1866
25°	1765	1819	1854
30°	1720	1782	1839
35°	1672	1750	1821
40°	1616	1715	1804
45°	1556	1674	1785
50°	1499	1629	1769
55°	1429	1599	1757
60°	1365	1560	1751
65°	1273	1551	1771
70°	1173	1537	1824
75°	1058	1560	1918
80°	916	1605	1802
85°	756	1346	1346



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	3.4
10°-20°	187.9	9.6
20°-30°	281.1	14.4
30°-40°	332.9	17.1
40°-50°	339.2	17.4
50°-60°	304.0	15.6
60°-70°	238.0	12.2
70°-80°	153.5	7.9
80°-90°	45.3	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°	534.9	27.5
0°-40°	867.8	44.5
0°-60°	1511.1	77.6
0°-90°	1948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	691	693	696	697	698	66
15°	657	661	666	672	673	185
25°	594	600	613	621	624	274
35°	509	515	533	549	554	318
45°	409	418	440	463	469	316
55°	304	314	341	364	374	273
65°	200	212	244	267	278	199
75°	102	117	150	175	184	109
85°	24	34	44	44	44	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	698.0	698.0	698.0	698.0	698.0
2.5°	693.5	695.3	698.9	699.8	699.8
5°	690.8	692.6	696.2	697.1	698.0
7.5°	686.2	687.1	691.7	693.5	694.4
10°	678.9	680.8	685.3	688.0	688.9
12.5°	668.9	671.7	677.1	680.8	681.7
15°	657.1	660.8	666.2	671.7	672.6
17.5°	644.4	648.0	655.3	661.7	663.5
20°	629.0	633.5	641.7	648.9	651.7
22.5°	613.5	617.1	627.1	636.2	639.0
25°	594.4	599.9	612.6	620.8	624.4
27.5°	574.4	580.8	593.5	604.4	608.0
30°	553.5	559.9	573.5	587.1	591.7
32.5°	531.7	539.0	555.3	569.0	573.5
35°	509.0	515.3	532.6	549.0	554.4
37.5°	485.3	490.8	510.8	528.1	533.5
40°	459.9	467.2	488.1	508.1	513.5
42.5°	434.5	442.6	463.5	485.3	490.8
45°	409.0	418.1	439.9	462.6	469.0
47.5°	384.5	391.7	416.3	438.1	447.2
50°	358.1	365.4	389.0	413.5	422.6
52.5°	330.8	340.8	366.3	389.9	400.8
55°	304.5	314.5	340.8	364.5	374.5
57.5°	279.9	288.1	315.4	339.9	349.9
60°	253.6	260.9	289.9	316.3	325.4
62.5°	225.4	236.3	266.3	290.8	301.8
65°	200.0	211.8	243.6	267.2	278.1
67.5°	176.3	187.2	218.1	243.6	255.4
70°	149.1	163.6	195.4	220.9	231.8
72.5°	127.2	140.0	172.7	198.1	210.0
75°	101.8	117.2	150.0	175.4	184.5
77.5°	80.9	96.3	127.2	147.2	151.8
80°	59.1	74.5	103.6	113.6	116.3
82.5°	40.0	54.5	74.5	77.3	78.2
85°	24.5	33.6	43.6	43.6	43.6
87.5°	11.8	13.6	15.5	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)