

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: P277332

Luminaire Tested: **22CZ2-29HE-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277332
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: 22CZ2-29HE-S-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2941.0 lumens
Efficiency: N/A
Efficacy: 138.1 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

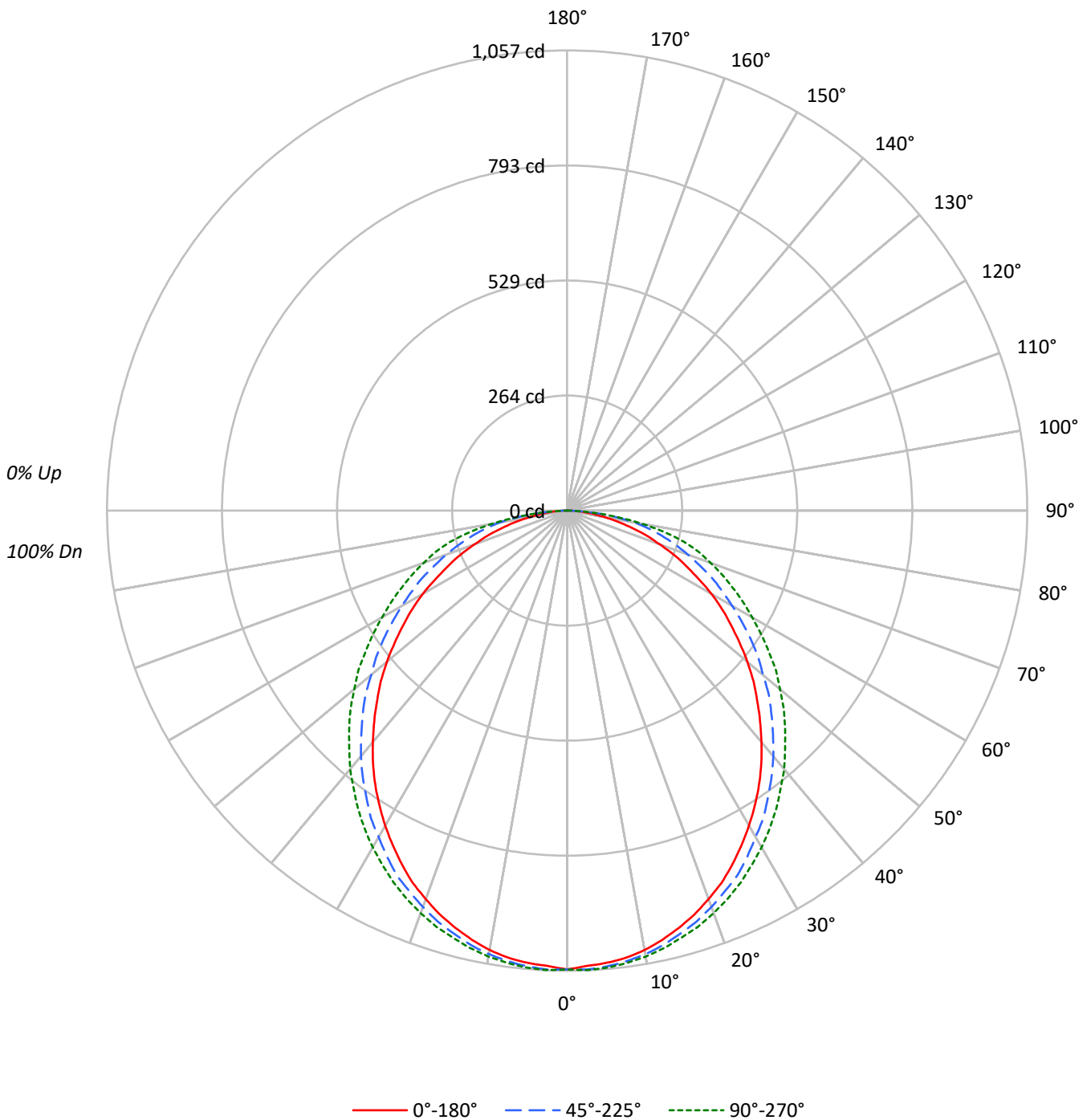
Input Watts (W): 21.297
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2836	2836	2836
5°	2817	2839	2847
10°	2801	2827	2842
15°	2764	2802	2829
20°	2719	2774	2818
25°	2665	2746	2799
30°	2597	2691	2776
35°	2524	2642	2750
40°	2439	2589	2723
45°	2350	2527	2695
50°	2263	2459	2671
55°	2157	2414	2652
60°	2060	2356	2644
65°	1922	2342	2674
70°	1770	2321	2753
75°	1598	2354	2897
80°	1382	2424	2721
85°	1142	2035	2035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.7	3.4
10°-20°	283.6	9.6
20°-30°	424.4	14.4
30°-40°	502.6	17.1
40°-50°	512.2	17.4
50°-60°	459.0	15.6
60°-70°	359.4	12.2
70°-80°	231.7	7.9
80°-90°	68.5	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°	807.6	27.5
0°-40°	1310.2	44.5
0°-60°	2281.4	77.6
0°-90°	2941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2941.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1043	1046	1051	1052	1054	99
15°	992	998	1006	1014	1015	280
25°	897	906	925	937	943	413
35°	768	778	804	829	837	480
45°	618	631	664	698	708	477
55°	460	475	515	550	565	412
65°	302	320	368	403	420	300
75°	154	177	226	265	279	165
85°	37	51	66	66	66	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.9	1053.9	1053.9	1053.9	1053.9
2.5°	1047.0	1049.7	1055.2	1056.6	1056.6
5°	1042.9	1045.6	1051.1	1052.5	1053.9
7.5°	1036.0	1037.4	1044.2	1047.0	1048.4
10°	1025.0	1027.8	1034.6	1038.8	1040.1
12.5°	1009.9	1014.1	1022.3	1027.8	1029.2
15°	992.1	997.6	1005.8	1014.1	1015.4
17.5°	972.9	978.4	989.4	999.0	1001.7
20°	949.6	956.4	968.8	979.8	983.9
22.5°	926.2	931.7	946.8	960.5	964.7
25°	897.4	905.7	924.9	937.2	942.7
27.5°	867.2	876.8	896.0	912.5	918.0
30°	835.7	845.3	865.9	886.4	893.3
32.5°	802.7	813.7	838.4	859.0	865.9
35°	768.4	778.0	804.1	828.8	837.0
37.5°	732.8	741.0	771.2	797.3	805.5
40°	694.3	705.3	736.9	767.1	775.3
42.5°	655.9	668.3	699.8	732.8	741.0
45°	617.5	631.2	664.1	698.5	708.1
47.5°	580.4	591.4	628.5	661.4	675.1
50°	540.6	551.6	587.3	624.4	638.1
52.5°	499.5	514.6	553.0	588.7	605.1
55°	459.7	474.8	514.6	550.3	565.3
57.5°	422.6	435.0	476.2	513.2	528.3
60°	382.8	393.8	437.7	477.5	491.2
62.5°	340.3	356.8	402.1	439.1	455.6
65°	301.9	319.7	367.8	403.4	419.9
67.5°	266.2	282.7	329.3	367.8	385.6
70°	225.0	247.0	295.0	333.4	349.9
72.5°	192.1	211.3	260.7	299.1	317.0
75°	153.7	177.0	226.4	264.8	278.6
77.5°	122.1	145.5	192.1	222.3	229.2
80°	89.2	112.5	156.4	171.5	175.6
82.5°	60.4	82.3	112.5	116.6	118.0
85°	37.0	50.8	65.9	65.9	65.9
87.5°	17.8	20.6	23.3	22.0	22.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)