

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: P277163

Luminaire Tested: **22CZ2-29HE-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277163
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29HE-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2656.0 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

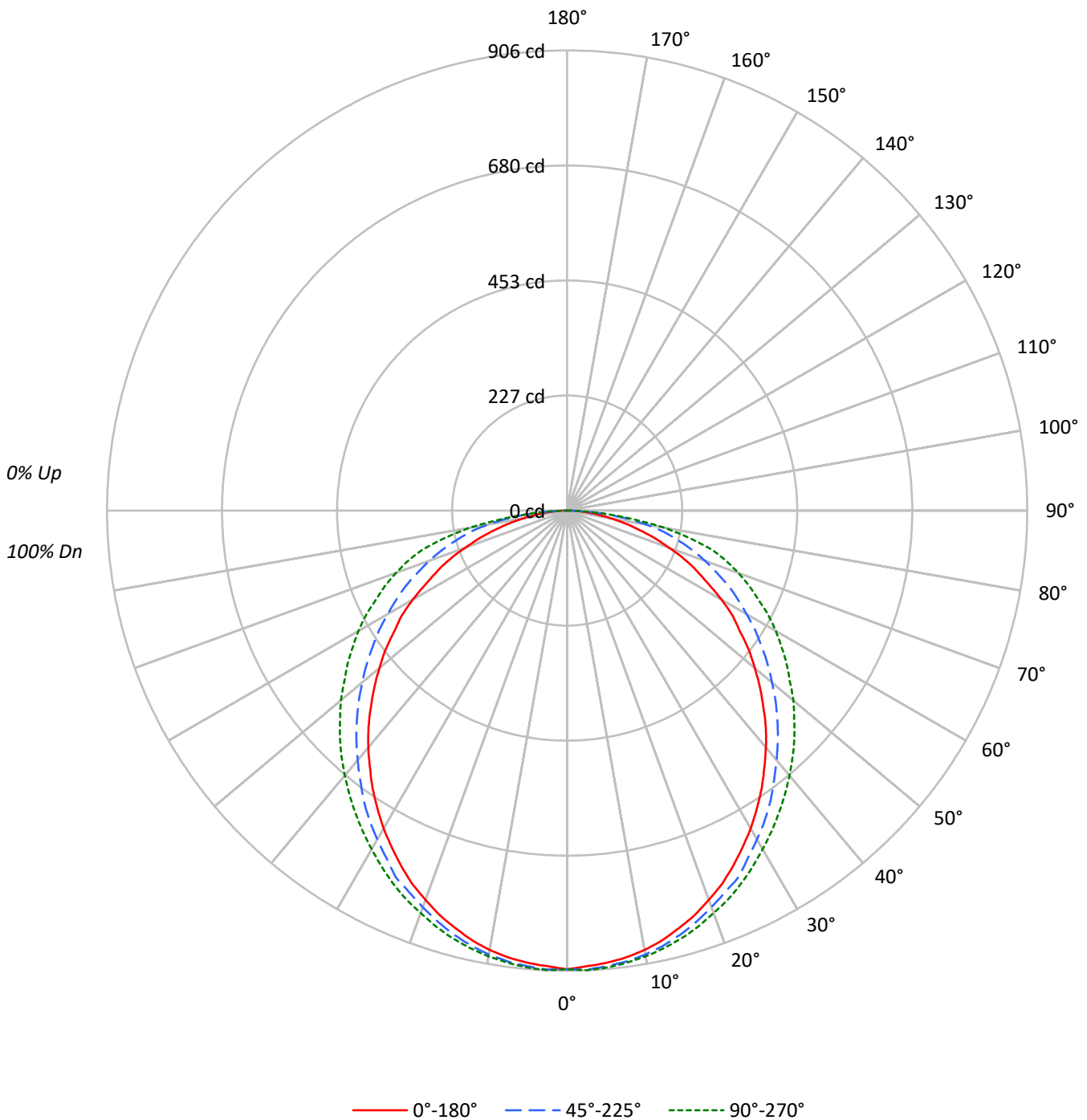
Input Watts (W): 20.832
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82					82			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68					68			
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56					56			
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48					48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41					41			
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36					36			
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32					32			
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28					28			
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25					25			
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2430	2430	2430
5°	2415	2432	2440
10°	2400	2425	2435
15°	2370	2407	2428
20°	2335	2380	2414
25°	2293	2367	2406
30°	2246	2323	2392
35°	2194	2293	2387
40°	2139	2254	2392
45°	2079	2228	2407
50°	2019	2205	2435
55°	1950	2195	2477
60°	1892	2195	2553
65°	1798	2230	2646
70°	1676	2272	2817
75°	1536	2351	3044
80°	1337	2450	2997
85°	1170	2180	2381



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	3.2
10°-20°	243.3	9.2
20°-30°	365.2	13.7
30°-40°	436.4	16.4
40°-50°	453.8	17.1
50°-60°	420.6	15.8
60°-70°	345.0	13.0
70°-80°	233.2	8.8
80°-90°	73.3	2.8
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°	693.9	26.1
0°-40°	1130.2	42.6
0°-60°	2004.6	75.5
0°-90°	2656.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2656.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	903	903	903	903	903	
5°	894	895	900	902	903	85
15°	851	855	864	869	872	240
25°	772	779	797	806	810	356
35°	668	677	698	719	727	417
45°	546	557	586	620	633	422
55°	416	429	468	510	528	374
65°	282	298	350	396	416	279
75°	148	172	226	272	293	157
85°	38	52	71	78	77	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	903.1	903.1	903.1	903.1	903.1
2.5°	897.9	900.5	904.4	905.7	905.7
5°	893.9	895.2	900.5	901.8	903.1
7.5°	887.4	890.0	895.2	896.6	897.9
10°	878.3	880.9	887.4	890.0	891.3
12.5°	866.5	869.1	877.0	880.9	882.2
15°	850.8	854.7	863.9	869.1	871.7
17.5°	835.1	839.0	848.2	856.0	858.7
20°	815.5	824.7	831.2	841.7	843.0
22.5°	795.9	801.1	812.9	823.4	828.6
25°	772.4	778.9	797.2	806.4	810.3
27.5°	747.6	756.7	771.1	785.5	790.7
30°	722.7	729.3	747.6	764.6	769.8
32.5°	695.3	704.4	724.0	741.0	748.9
35°	667.8	677.0	697.9	718.8	726.7
37.5°	637.8	648.2	669.1	694.0	704.4
40°	609.0	616.9	641.7	671.8	680.9
42.5°	579.0	588.1	614.3	646.9	657.4
45°	546.3	556.8	585.5	619.5	632.6
47.5°	514.9	525.4	556.8	590.7	606.4
50°	482.3	495.3	526.7	565.9	581.6
52.5°	450.9	462.7	497.9	538.5	552.8
55°	415.6	428.7	467.9	509.7	528.0
57.5°	386.9	396.0	439.1	482.3	500.6
60°	351.6	363.3	407.8	453.5	474.4
62.5°	313.7	333.3	379.0	426.1	447.0
65°	282.3	298.0	350.3	396.0	415.6
67.5°	249.6	266.6	317.6	365.9	388.2
70°	213.0	235.2	288.8	337.2	358.1
72.5°	180.4	203.9	258.8	305.8	328.0
75°	147.7	172.5	226.1	271.8	292.8
77.5°	116.3	143.8	196.0	231.3	244.4
80°	86.3	112.4	158.1	183.0	193.4
82.5°	60.1	82.3	116.3	129.4	132.0
85°	37.9	52.3	70.6	78.4	77.1
87.5°	17.0	20.9	26.1	28.8	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)