

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: P277450

Luminaire Tested: **22CZ2-24HE-S-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P277450
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-L92765-W2A1-U-5700K
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2258.0 lumens
Efficiency: N/A
Efficacy: 124.5 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

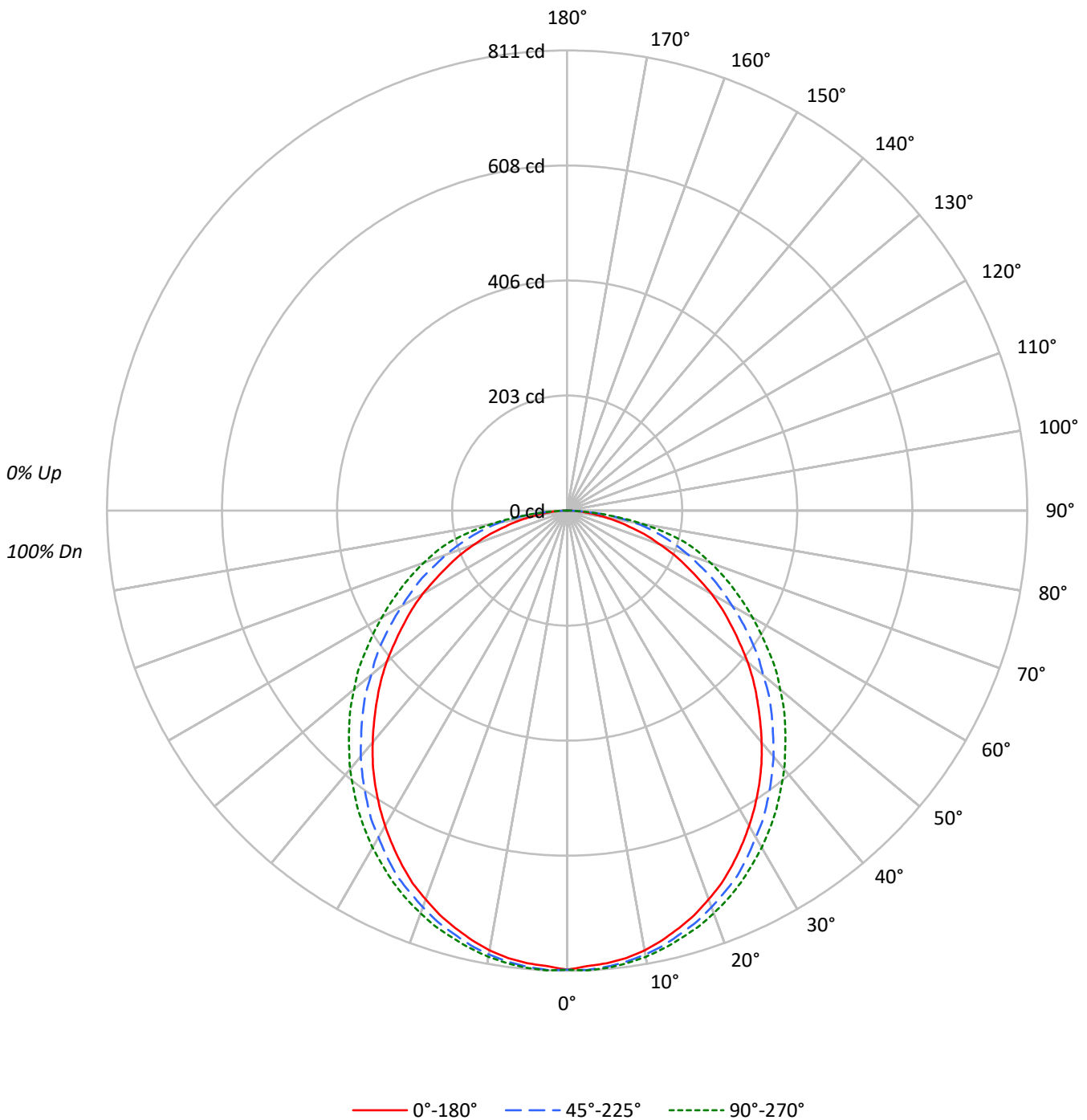
Input Watts (W): 18.135
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2177	2177	2177
5°	2163	2180	2186
10°	2150	2171	2182
15°	2122	2151	2172
20°	2088	2130	2163
25°	2046	2108	2149
30°	1994	2066	2131
35°	1938	2028	2111
40°	1873	1987	2091
45°	1804	1940	2069
50°	1738	1888	2051
55°	1656	1854	2037
60°	1582	1809	2030
65°	1476	1798	2053
70°	1360	1782	2114
75°	1227	1807	2224
80°	1062	1861	2091
85°	877	1562	1562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	3.4
10°-20°	217.8	9.6
20°-30°	325.8	14.4
30°-40°	385.8	17.1
40°-50°	393.2	17.4
50°-60°	352.4	15.6
60°-70°	275.9	12.2
70°-80°	177.9	7.9
80°-90°	52.6	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°	620.1	27.5
0°-40°	1005.9	44.5
0°-60°	1751.6	77.6
0°-90°	2258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	801	803	807	808	809	76
15°	762	766	772	779	780	215
25°	689	695	710	720	724	317
35°	590	597	617	636	643	369
45°	474	485	510	536	544	366
55°	353	364	395	422	434	316
65°	232	246	282	310	322	230
75°	118	136	174	203	214	127
85°	28	39	51	51	51	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.1	809.1	809.1	809.1	809.1
2.5°	803.8	806.0	810.2	811.2	811.2
5°	800.7	802.8	807.0	808.1	809.1
7.5°	795.4	796.5	801.7	803.8	804.9
10°	787.0	789.1	794.4	797.5	798.6
12.5°	775.4	778.6	784.9	789.1	790.1
15°	761.7	765.9	772.2	778.6	779.6
17.5°	747.0	751.2	759.6	767.0	769.1
20°	729.0	734.3	743.8	752.2	755.4
22.5°	711.1	715.3	726.9	737.5	740.6
25°	689.0	695.3	710.1	719.6	723.8
27.5°	665.8	673.2	688.0	700.6	704.8
30°	641.6	649.0	664.8	680.6	685.8
32.5°	616.3	624.7	643.7	659.5	664.8
35°	590.0	597.4	617.4	636.3	642.7
37.5°	562.6	568.9	592.1	612.1	618.4
40°	533.1	541.5	565.7	588.9	595.2
42.5°	503.6	513.1	537.3	562.6	568.9
45°	474.1	484.6	509.9	536.2	543.6
47.5°	445.6	454.1	482.5	507.8	518.3
50°	415.1	423.5	450.9	479.4	489.9
52.5°	383.5	395.1	424.6	452.0	464.6
55°	352.9	364.5	395.1	422.5	434.1
57.5°	324.5	334.0	365.6	394.0	405.6
60°	293.9	302.4	336.1	366.6	377.2
62.5°	261.3	273.9	308.7	337.1	349.8
65°	231.8	245.5	282.3	309.7	322.4
67.5°	204.4	217.0	252.8	282.3	296.0
70°	172.8	189.6	226.5	256.0	268.7
72.5°	147.5	162.2	200.2	229.7	243.4
75°	118.0	135.9	173.8	203.3	213.9
77.5°	93.8	111.7	147.5	170.7	175.9
80°	68.5	86.4	120.1	131.7	134.9
82.5°	46.4	63.2	86.4	89.6	90.6
85°	28.4	39.0	50.6	50.6	50.6
87.5°	13.7	15.8	17.9	16.9	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)