

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: P276020

Luminaire Tested: **24CZ2-30-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276020
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2679.9 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

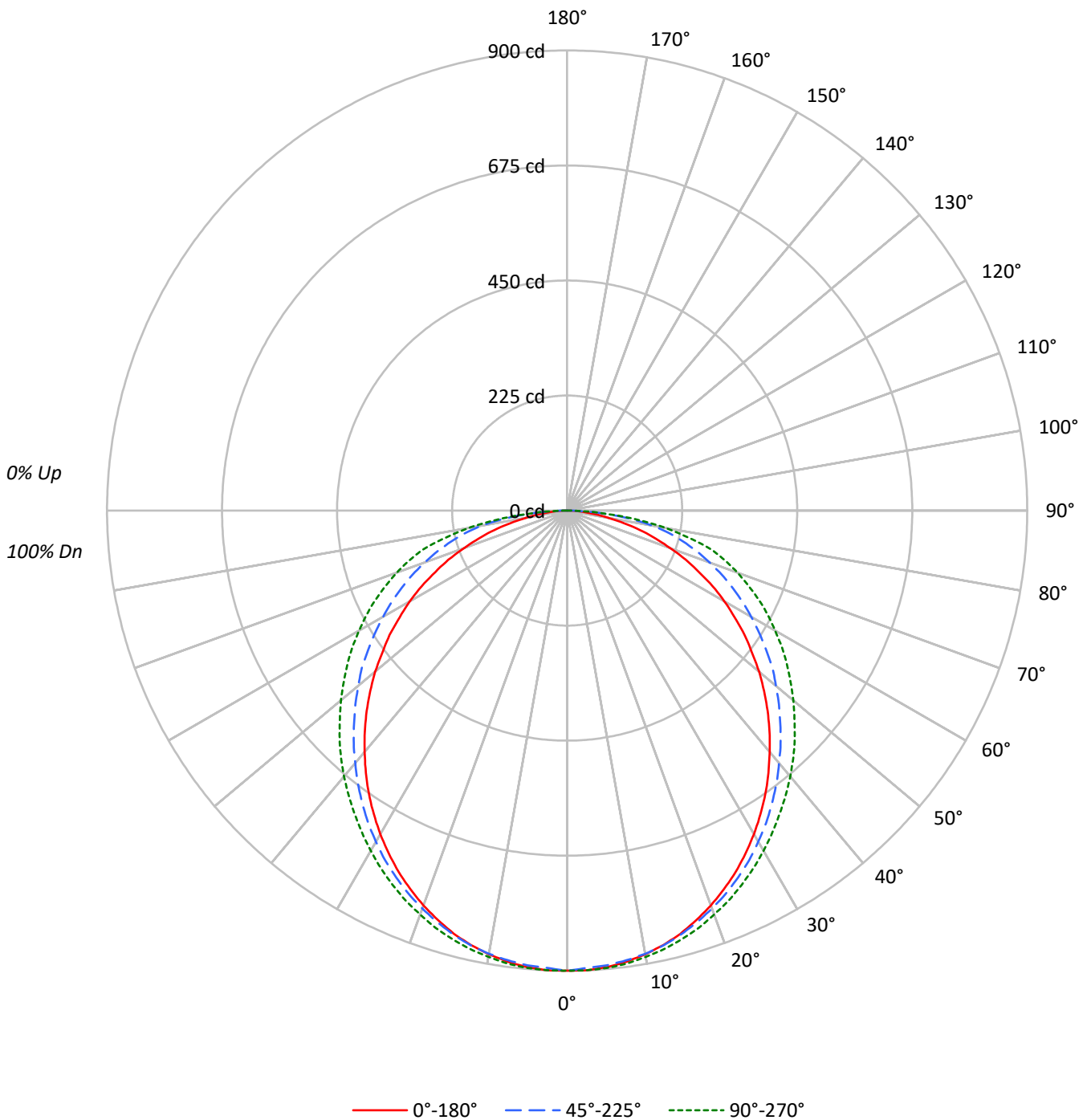
Input Watts (W): 22.676004
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1211	1211	1211
5°	1210	1206	1213
10°	1204	1202	1211
15°	1193	1196	1209
20°	1177	1186	1204
25°	1158	1175	1199
30°	1135	1162	1194
35°	1111	1147	1190
40°	1082	1133	1192
45°	1055	1122	1198
50°	1026	1116	1209
55°	994	1114	1232
60°	956	1119	1264
65°	905	1136	1318
70°	841	1164	1393
75°	767	1223	1511
80°	631	1316	1511
85°	483	1215	1298



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.1	3.2
10°-20°	242.9	9.1
20°-30°	365.6	13.6
30°-40°	438.1	16.3
40°-50°	456.6	17.0
50°-60°	424.8	15.9
60°-70°	349.9	13.1
70°-80°	238.3	8.9
80°-90°	78.7	2.9
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°	693.6	25.9
0°-40°	1131.7	42.2
0°-60°	2013.1	75.1
0°-90°	2679.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2679.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	896	896	893	897	898	85
15°	857	858	859	867	868	241
25°	780	784	792	805	808	359
35°	676	684	698	717	724	423
45°	554	566	589	619	630	428
55°	424	438	475	512	525	378
65°	284	309	357	399	414	282
75°	148	181	235	277	291	156
85°	31	61	79	84	84	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	899.8	899.8	899.8	899.8	899.8
2.5°	899.8	899.8	895.3	899.8	899.8
5°	896.2	896.2	892.6	897.1	898.0
7.5°	889.9	890.8	887.2	892.6	893.5
10°	881.0	881.9	880.1	885.4	886.3
12.5°	870.2	871.1	871.1	877.4	878.3
15°	856.8	857.7	858.6	866.7	867.6
17.5°	839.8	842.5	844.3	854.1	855.9
20°	821.9	824.6	828.2	838.9	840.7
22.5°	801.4	804.9	811.2	822.8	825.5
25°	779.9	783.5	791.5	804.9	807.6
27.5°	755.8	761.1	771.0	785.3	788.8
30°	730.7	736.1	747.7	762.9	768.3
32.5°	703.9	711.0	724.5	741.4	746.8
35°	676.2	684.2	698.5	717.3	724.5
37.5°	646.6	655.6	672.6	693.1	702.1
40°	616.2	627.0	644.9	669.0	678.8
42.5°	585.8	595.7	618.0	644.0	654.7
45°	554.5	566.1	589.4	618.9	629.6
47.5°	522.3	533.9	561.7	593.0	602.8
50°	490.1	501.7	533.1	566.1	577.8
52.5°	455.2	470.4	506.2	539.3	550.9
55°	423.9	438.2	474.9	512.5	525.0
57.5°	388.2	405.2	445.4	484.8	498.2
60°	355.1	373.0	415.9	456.1	469.6
62.5°	321.1	340.8	386.4	427.5	442.7
65°	284.4	308.6	356.9	398.9	414.1
67.5°	251.3	276.4	327.3	370.3	383.7
70°	213.8	244.2	296.0	339.0	354.2
72.5°	181.6	212.0	266.5	308.6	323.8
75°	147.6	180.7	235.2	277.3	290.7
77.5°	113.6	150.3	204.8	237.0	241.5
80°	81.4	119.8	169.9	188.7	195.0
82.5°	57.2	92.1	125.2	137.7	141.3
85°	31.3	60.8	78.7	84.1	84.1
87.5°	13.4	25.9	31.3	32.2	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)