

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: P275970

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275970
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: 24CZ2-30HE-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2712.6 lumens
Efficiency: N/A
Efficacy: 132.7 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

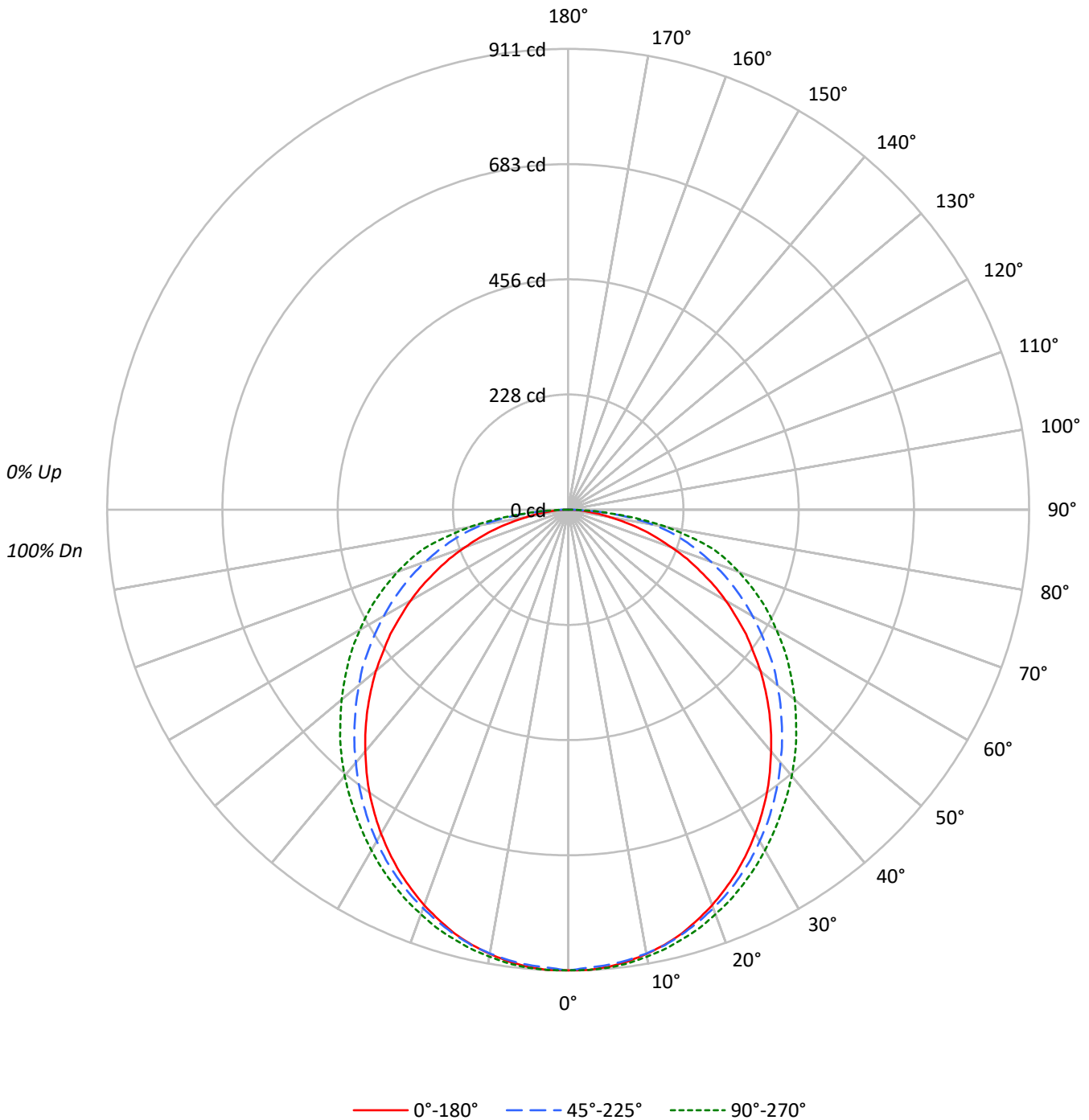
Input Watts (W): 20.447166
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1225	1225	1225
5°	1225	1220	1228
10°	1218	1217	1226
15°	1208	1211	1223
20°	1191	1200	1218
25°	1172	1189	1214
30°	1149	1176	1208
35°	1124	1161	1204
40°	1095	1146	1207
45°	1068	1135	1213
50°	1038	1129	1224
55°	1007	1128	1247
60°	967	1133	1279
65°	917	1150	1335
70°	851	1179	1410
75°	777	1238	1529
80°	638	1333	1530
85°	489	1230	1314



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.2
10°-20°	245.9	9.1
20°-30°	370.0	13.6
30°-40°	443.5	16.3
40°-50°	462.1	17.0
50°-60°	430.0	15.9
60°-70°	354.1	13.1
70°-80°	241.2	8.9
80°-90°	79.6	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°	702.1	25.9
0°-40°	1145.5	42.2
0°-60°	2037.6	75.1
0°-90°	2712.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2712.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	907	907	904	908	909	86
15°	867	868	869	877	878	244
25°	789	793	801	815	818	363
35°	684	693	707	726	733	428
45°	561	573	597	626	637	433
55°	429	444	481	519	531	382
65°	288	312	361	404	419	286
75°	149	183	238	281	294	158
85°	32	62	80	85	85	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.7	910.7	910.7	910.7	910.7
2.5°	910.7	910.7	906.2	910.7	910.7
5°	907.1	907.1	903.5	908.0	908.9
7.5°	900.8	901.7	898.1	903.5	904.4
10°	891.7	892.6	890.8	896.2	897.1
12.5°	880.9	881.8	881.8	888.1	889.0
15°	867.3	868.2	869.1	877.2	878.1
17.5°	850.1	852.8	854.6	864.6	866.4
20°	832.0	834.7	838.3	849.2	851.0
22.5°	811.1	814.8	821.1	832.9	835.6
25°	789.4	793.0	801.2	814.8	817.5
27.5°	765.0	770.4	780.4	794.8	798.5
30°	739.6	745.1	756.8	772.2	777.6
32.5°	712.5	719.7	733.3	750.5	755.9
35°	684.4	692.6	707.0	726.0	733.3
37.5°	654.5	663.6	680.8	701.6	710.7
40°	623.7	634.6	652.7	677.2	687.1
42.5°	593.0	602.9	625.6	651.8	662.7
45°	561.3	573.1	596.6	626.5	637.3
47.5°	528.7	540.5	568.5	600.2	610.2
50°	496.1	507.9	539.6	573.1	584.8
52.5°	460.8	476.2	512.4	545.9	557.7
55°	429.1	443.6	480.7	518.7	531.4
57.5°	392.9	410.1	450.8	490.7	504.2
60°	359.4	377.5	421.0	461.7	475.3
62.5°	325.0	344.9	391.1	432.7	448.1
65°	287.9	312.3	361.2	403.8	419.2
67.5°	254.4	279.7	331.3	374.8	388.4
70°	216.4	247.1	299.7	343.1	358.5
72.5°	183.8	214.6	269.8	312.3	327.7
75°	149.4	182.9	238.1	280.6	294.2
77.5°	115.0	152.1	207.3	239.9	244.4
80°	82.4	121.3	172.0	191.0	197.4
82.5°	57.9	93.2	126.7	139.4	143.0
85°	31.7	61.6	79.7	85.1	85.1
87.5°	13.6	26.3	31.7	32.6	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)