

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: P276187

Luminaire Tested: **24CZ2-35HE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276187  
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: 24CZ2-35HE-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2712.2 lumens  
Efficiency: N/A  
Efficacy: 113.0 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

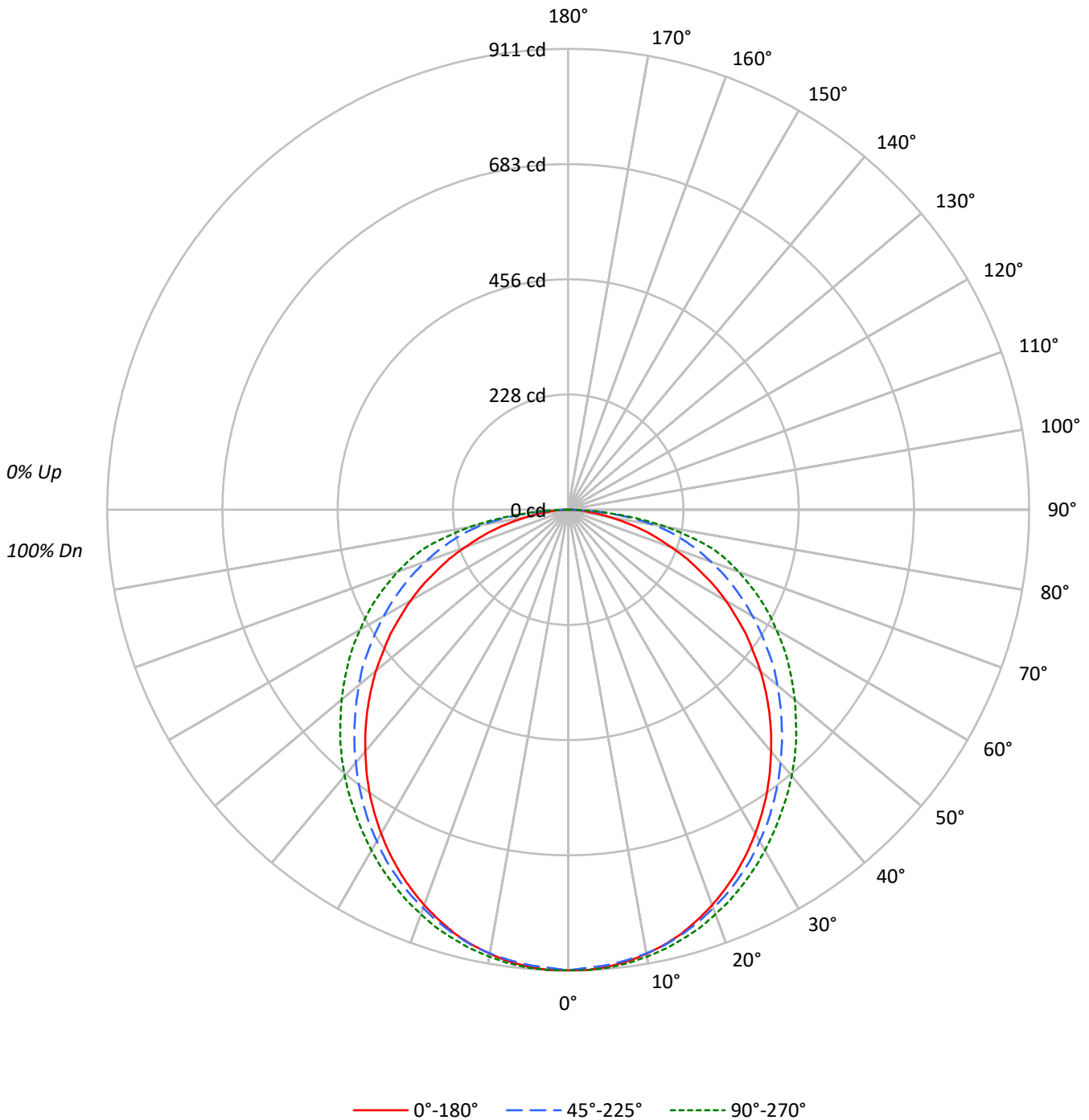
Input Watts (W): 23.994  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	1227
10°	1218	1217	1226
15°	1208	1210	1223
20°	1191	1200	1218
25°	1172	1189	1213
30°	1149	1176	1208
35°	1124	1161	1204
40°	1095	1146	1207
45°	1068	1135	1212
50°	1038	1129	1224
55°	1007	1127	1246
60°	967	1133	1279
65°	916	1150	1334
70°	851	1179	1410
75°	777	1238	1529
80°	638	1333	1529
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°	443.4	16.3
40°-50°	462.1	17.0
50°-60°	429.9	15.9
60°-70°	354.1	13.1
70°-80°	241.1	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°	702.0	25.9
0°-40°	1145.4	42.2
0°-60°	2037.3	75.1
0°-90°	2712.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2712.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	907	907	903	908	909	86
15°	867	868	869	877	878	244
25°	789	793	801	815	817	363
35°	684	692	707	726	733	428
45°	561	573	596	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°	910.6	910.6	910.6	910.6	910.6
2.5°	910.6	910.6	906.1	910.6	910.6
5°	907.0	907.0	903.4	907.9	908.8
7.5°	900.6	901.6	897.9	903.4	904.3
10°	891.6	892.5	890.7	896.1	897.0
12.5°	880.7	881.6	881.6	888.0	888.9
15°	867.2	868.1	869.0	877.1	878.0
17.5°	850.0	852.7	854.5	864.4	866.3
20°	831.9	834.6	838.2	849.1	850.9
22.5°	811.0	814.7	821.0	832.8	835.5
25°	789.3	792.9	801.1	814.7	817.4
27.5°	764.9	770.3	780.3	794.7	798.4
30°	739.5	745.0	756.7	772.1	777.5
32.5°	712.4	719.6	733.2	750.4	755.8
35°	684.3	692.5	706.9	726.0	733.2
37.5°	654.4	663.5	680.7	701.5	710.6
40°	623.7	634.5	652.6	677.1	687.0
42.5°	592.9	602.8	625.5	651.7	662.6
45°	561.2	573.0	596.5	626.4	637.2
47.5°	528.6	540.4	568.4	600.1	610.1
50°	496.0	507.8	539.5	573.0	584.7
52.5°	460.7	476.1	512.3	545.8	557.6
55°	429.1	443.5	480.6	518.7	531.3
57.5°	392.8	410.0	450.8	490.6	504.2
60°	359.4	377.5	420.9	461.6	475.2
62.5°	325.0	344.9	391.0	432.7	448.1
65°	287.8	312.3	361.2	403.7	419.1
67.5°	254.4	279.7	331.3	374.7	388.3
70°	216.3	247.1	299.6	343.1	358.4
72.5°	183.8	214.5	269.7	312.3	327.7
75°	149.4	182.8	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	197.3
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)