

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: P275943

Luminaire Tested: **24CZ2-30-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275943  
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-L83050-W2A1-U-3500K  
Description: CRUZE 2.0 2x4 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: 2869.0 lumens  
Efficiency: N/A  
Efficacy: 131.8 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

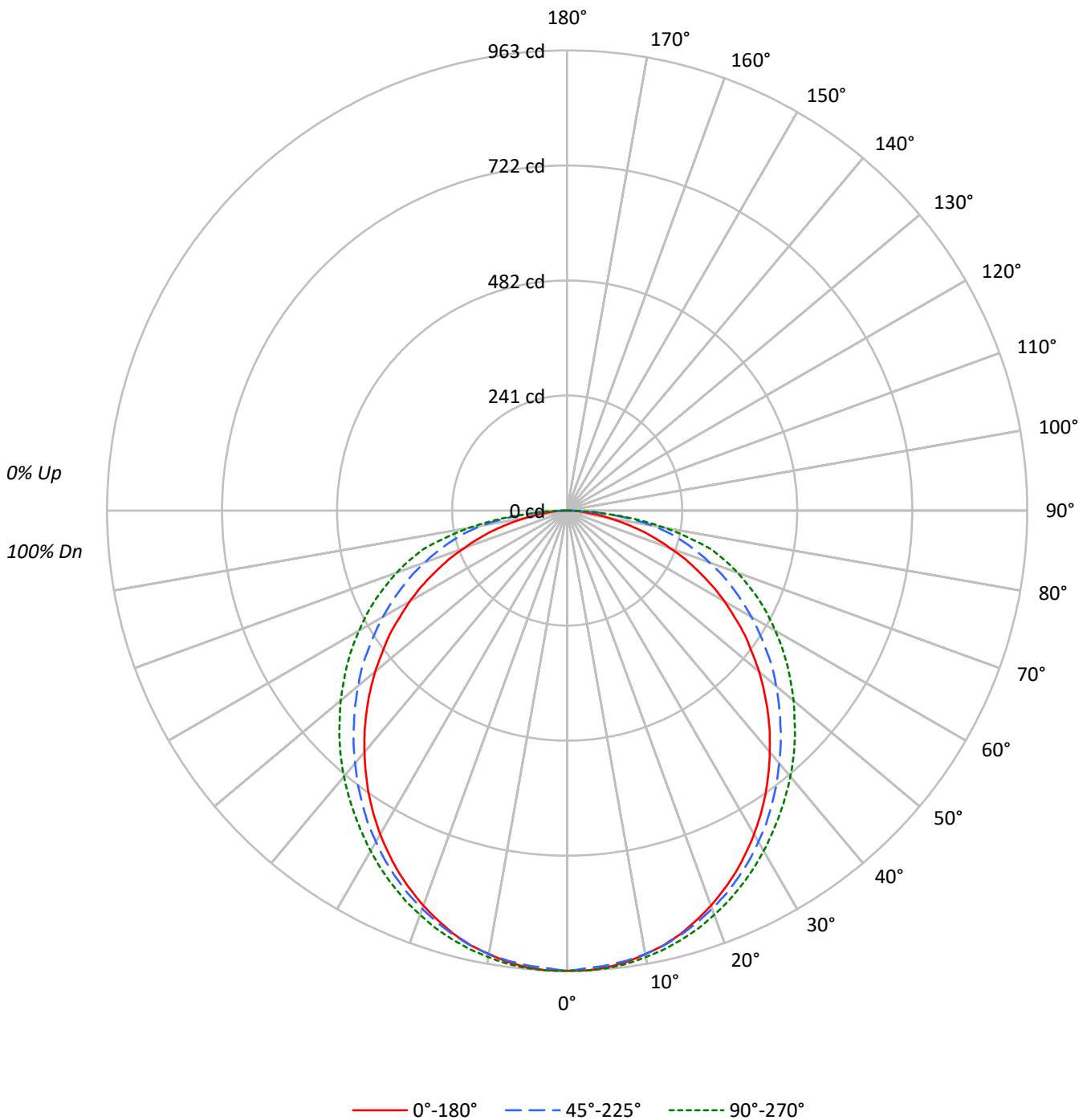
Input Watts (W): 21.762  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1296	1296	1296
5°	1296	1291	1298
10°	1289	1287	1296
15°	1278	1280	1294
20°	1260	1270	1289
25°	1240	1258	1284
30°	1215	1244	1278
35°	1189	1228	1274
40°	1159	1213	1277
45°	1130	1201	1283
50°	1098	1195	1295
55°	1065	1193	1319
60°	1023	1198	1353
65°	969	1216	1411
70°	900	1247	1492
75°	821	1309	1618
80°	675	1409	1617
85°	517	1301	1389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.1	3.2
10°-20°	260.1	9.1
20°-30°	391.4	13.6
30°-40°	469.0	16.3
40°-50°	488.8	17.0
50°-60°	454.8	15.9
60°-70°	374.5	13.1
70°-80°	255.1	8.9
80°-90°	84.2	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°	742.6	25.9
0°-40°	1211.6	42.2
0°-60°	2155.2	75.1
0°-90°	2869.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2869.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	959	959	956	960	961	91
15°	917	918	919	928	929	258
25°	835	839	847	862	865	384
35°	724	732	748	768	776	452
45°	594	606	631	663	674	458
55°	454	469	508	549	562	405
65°	304	330	382	427	443	302
75°	158	193	252	297	311	167
85°	34	65	84	90	90	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	963.3	963.3	963.3	963.3	963.3
2.5°	963.3	963.3	958.5	963.3	963.3
5°	959.4	959.4	955.6	960.4	961.3
7.5°	952.7	953.7	949.9	955.6	956.6
10°	943.1	944.1	942.2	947.9	948.9
12.5°	931.7	932.6	932.6	939.3	940.3
15°	917.3	918.3	919.2	927.8	928.8
17.5°	899.1	902.0	903.9	914.4	916.3
20°	880.0	882.8	886.7	898.1	900.1
22.5°	857.9	861.8	868.5	880.9	883.8
25°	835.0	838.8	847.4	861.8	864.6
27.5°	809.1	814.8	825.4	840.7	844.5
30°	782.3	788.0	800.5	816.8	822.5
32.5°	753.6	761.2	775.6	793.8	799.5
35°	723.9	732.5	747.8	767.9	775.6
37.5°	692.3	701.9	720.0	742.1	751.6
40°	659.7	671.2	690.4	716.2	726.8
42.5°	627.2	637.7	661.6	689.4	700.9
45°	593.7	606.1	631.0	662.6	674.1
47.5°	559.2	571.6	601.3	634.8	645.4
50°	524.7	537.2	570.7	606.1	618.6
52.5°	487.4	503.7	542.0	577.4	589.8
55°	453.9	469.2	508.4	548.7	562.1
57.5°	415.6	433.8	476.8	519.0	533.3
60°	380.1	399.3	445.2	488.3	502.7
62.5°	343.7	364.8	413.6	457.7	474.0
65°	304.5	330.3	382.0	427.1	443.3
67.5°	269.1	295.9	350.4	396.4	410.8
70°	228.8	261.4	316.9	362.9	379.2
72.5°	194.4	226.9	285.3	330.3	346.6
75°	158.0	193.4	251.8	296.8	311.2
77.5°	121.6	160.9	219.3	253.7	258.5
80°	87.1	128.3	181.9	202.0	208.7
82.5°	61.3	98.6	134.1	147.5	151.3
85°	33.5	65.1	84.3	90.0	90.0
87.5°	14.4	27.8	33.5	34.5	35.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)