

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: P276462

Luminaire Tested: **24CZ2-30HE-S-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276462  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-S-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2800.1 lumens  
Efficiency: N/A  
Efficacy: 142.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

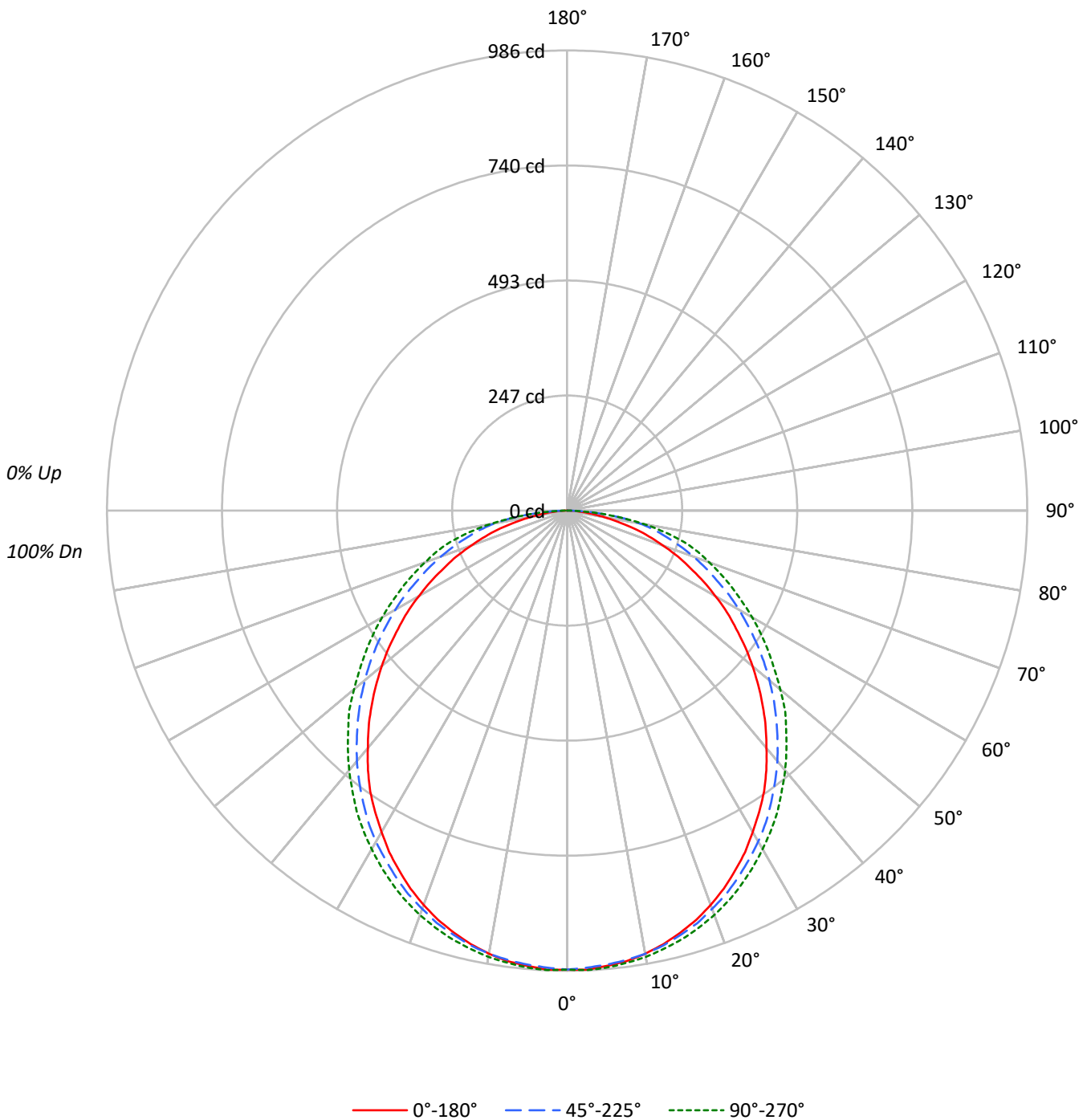
Input Watts (W): 19.623  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1324	1324	1324
5°	1323	1319	1327
10°	1317	1317	1327
15°	1305	1311	1324
20°	1288	1300	1321
25°	1264	1287	1313
30°	1235	1273	1302
35°	1208	1252	1291
40°	1167	1231	1276
45°	1129	1207	1263
50°	1085	1184	1247
55°	1037	1162	1235
60°	988	1144	1232
65°	926	1124	1240
70°	857	1130	1273
75°	767	1151	1345
80°	620	1220	1316
85°	466	1071	1044



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.1	3.3
10°-20°	266.1	9.5
20°-30°	400.0	14.3
30°-40°	476.5	17.0
40°-50°	487.6	17.4
50°-60°	439.0	15.7
60°-70°	344.8	12.3
70°-80°	223.8	8.0
80°-90°	69.2	2.5
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°	759.2	27.1
0°-40°	1235.7	44.1
0°-60°	2162.4	77.2
0°-90°	2800.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2800.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	984	984	984	984	984	
5°	979	981	977	982	983	93
15°	936	939	941	949	951	264
25°	851	858	867	881	884	392
35°	736	744	762	781	786	459
45°	593	608	634	658	664	457
55°	442	462	495	521	526	396
65°	291	313	353	382	390	290
75°	148	176	222	252	259	156
85°	30	56	69	68	68	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	983.7	983.7	983.7	983.7	983.7
2.5°	984.6	984.6	980.1	984.6	985.5
5°	979.2	981.0	976.6	981.9	982.8
7.5°	973.9	973.9	971.2	976.6	977.5
10°	964.1	965.0	964.1	970.3	971.2
12.5°	951.7	953.4	954.3	960.6	961.5
15°	936.5	939.2	941.0	949.0	950.8
17.5°	919.6	922.3	926.8	935.7	937.4
20°	899.2	902.8	908.1	919.6	922.3
22.5°	877.0	880.5	889.4	900.1	904.5
25°	851.2	858.3	867.2	881.4	884.1
27.5°	825.4	831.6	843.2	858.3	861.8
30°	795.1	804.9	819.1	834.3	837.8
32.5°	765.8	775.6	792.5	808.5	812.9
35°	735.5	744.4	762.2	780.9	786.2
37.5°	700.9	712.4	732.0	750.7	756.0
40°	664.4	678.6	700.9	720.4	726.6
42.5°	629.7	644.8	667.1	688.4	695.5
45°	593.2	607.5	634.1	658.2	663.5
47.5°	555.9	571.9	600.4	624.4	633.3
50°	518.5	535.4	565.7	590.6	595.9
52.5°	481.2	499.0	531.0	557.7	560.3
55°	442.0	461.6	495.4	521.2	526.5
57.5°	406.5	423.4	459.8	486.5	492.7
60°	367.3	386.0	425.1	450.0	458.0
62.5°	330.0	349.5	390.5	415.4	422.5
65°	290.8	313.1	353.1	382.4	389.6
67.5°	257.0	278.4	321.1	349.5	356.7
70°	217.9	241.9	287.3	316.6	323.7
72.5°	184.1	209.0	254.4	282.8	293.5
75°	147.6	176.1	221.5	251.7	258.8
77.5°	112.1	145.0	191.2	214.3	214.3
80°	80.0	114.7	157.4	168.1	169.9
82.5°	52.5	86.3	116.5	115.6	115.6
85°	30.2	56.0	69.4	67.6	67.6
87.5°	11.6	23.1	24.9	24.9	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)