

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: P276693

Luminaire Tested: **24CZ2-30-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P276693
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: 24CZ2-30-S-UNV-L92765-W2A1-U-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2829.9 lumens
Efficiency: N/A
Efficacy: 126.3 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

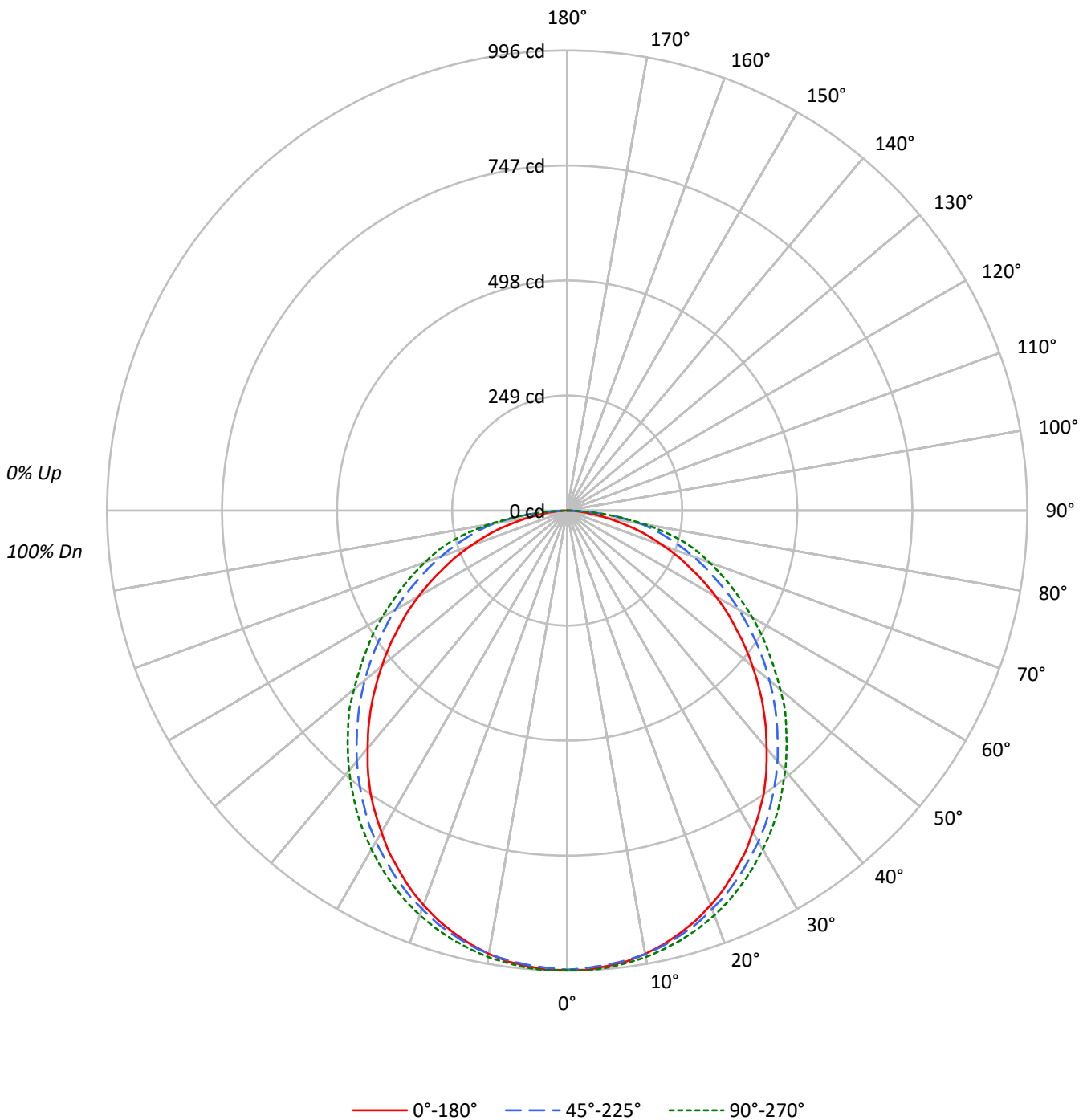
Input Watts (W): 22.413
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1338	1338	1338
5°	1337	1333	1342
10°	1331	1331	1341
15°	1318	1325	1338
20°	1301	1314	1335
25°	1277	1301	1326
30°	1249	1286	1315
35°	1221	1265	1305
40°	1179	1244	1290
45°	1141	1220	1276
50°	1097	1197	1261
55°	1048	1175	1248
60°	999	1156	1246
65°	936	1136	1253
70°	866	1142	1287
75°	776	1163	1360
80°	627	1233	1330
85°	472	1082	1054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.1	3.3
10°-20°	268.9	9.5
20°-30°	404.3	14.3
30°-40°	481.5	17.0
40°-50°	492.8	17.4
50°-60°	443.7	15.7
60°-70°	348.4	12.3
70°-80°	226.1	8.0
80°-90°	70.0	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°	767.3	27.1
0°-40°	1248.8	44.1
0°-60°	2185.4	77.2
0°-90°	2829.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2829.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	994	994	994	994	994	
5°	990	992	987	992	993	94
15°	946	949	951	959	961	267
25°	860	867	876	891	894	396
35°	743	752	770	789	795	464
45°	600	614	641	665	671	462
55°	447	466	501	527	532	400
65°	294	316	357	386	394	293
75°	149	178	224	254	262	158
85°	31	57	70	68	68	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	994.2	994.2	994.2	994.2	994.2
2.5°	995.1	995.1	990.6	995.1	996.0
5°	989.7	991.5	987.0	992.4	993.3
7.5°	984.3	984.3	981.6	987.0	987.9
10°	974.4	975.3	974.4	980.7	981.6
12.5°	961.8	963.6	964.5	970.8	971.7
15°	946.5	949.2	951.0	959.1	960.9
17.5°	929.4	932.1	936.6	945.6	947.4
20°	908.8	912.4	917.8	929.4	932.1
22.5°	886.3	889.9	898.9	909.7	914.2
25°	860.2	867.4	876.4	890.8	893.5
27.5°	834.2	840.5	852.1	867.4	871.0
30°	803.6	813.5	827.9	843.2	846.7
32.5°	773.9	783.8	800.9	817.1	821.6
35°	743.4	752.4	770.3	789.2	794.6
37.5°	708.3	720.0	739.8	758.7	764.0
40°	671.5	685.8	708.3	728.1	734.4
42.5°	636.4	651.7	674.2	695.7	702.9
45°	599.6	613.9	640.9	665.2	670.6
47.5°	561.8	578.0	606.7	631.0	640.0
50°	524.0	541.1	571.7	596.9	602.3
52.5°	486.3	504.3	536.6	563.6	566.3
55°	446.7	466.5	500.7	526.7	532.1
57.5°	410.8	427.9	464.7	491.7	498.0
60°	371.2	390.1	429.7	454.8	462.9
62.5°	333.5	353.3	394.6	419.8	427.0
65°	293.9	316.4	356.9	386.5	393.7
67.5°	259.8	281.3	324.5	353.3	360.5
70°	220.2	244.5	290.3	320.0	327.2
72.5°	186.1	211.2	257.1	285.8	296.6
75°	149.2	178.0	223.8	254.4	261.6
77.5°	113.3	146.5	193.3	216.6	216.6
80°	80.9	116.0	159.1	169.9	171.7
82.5°	53.0	87.2	117.8	116.9	116.9
85°	30.6	56.6	70.1	68.3	68.3
87.5°	11.7	23.4	25.2	25.2	24.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)