

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: P389694

Luminaire Tested: **24CZ2-30VHE-S-UNV-L950-CD1-SDWPD1-U**

Issue Date: 2/28/2020

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: P389694
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-30VHE-S-UNV-L950-CD1-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2798.8 lumens
Efficiency: N/A
Efficacy: 137.2 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

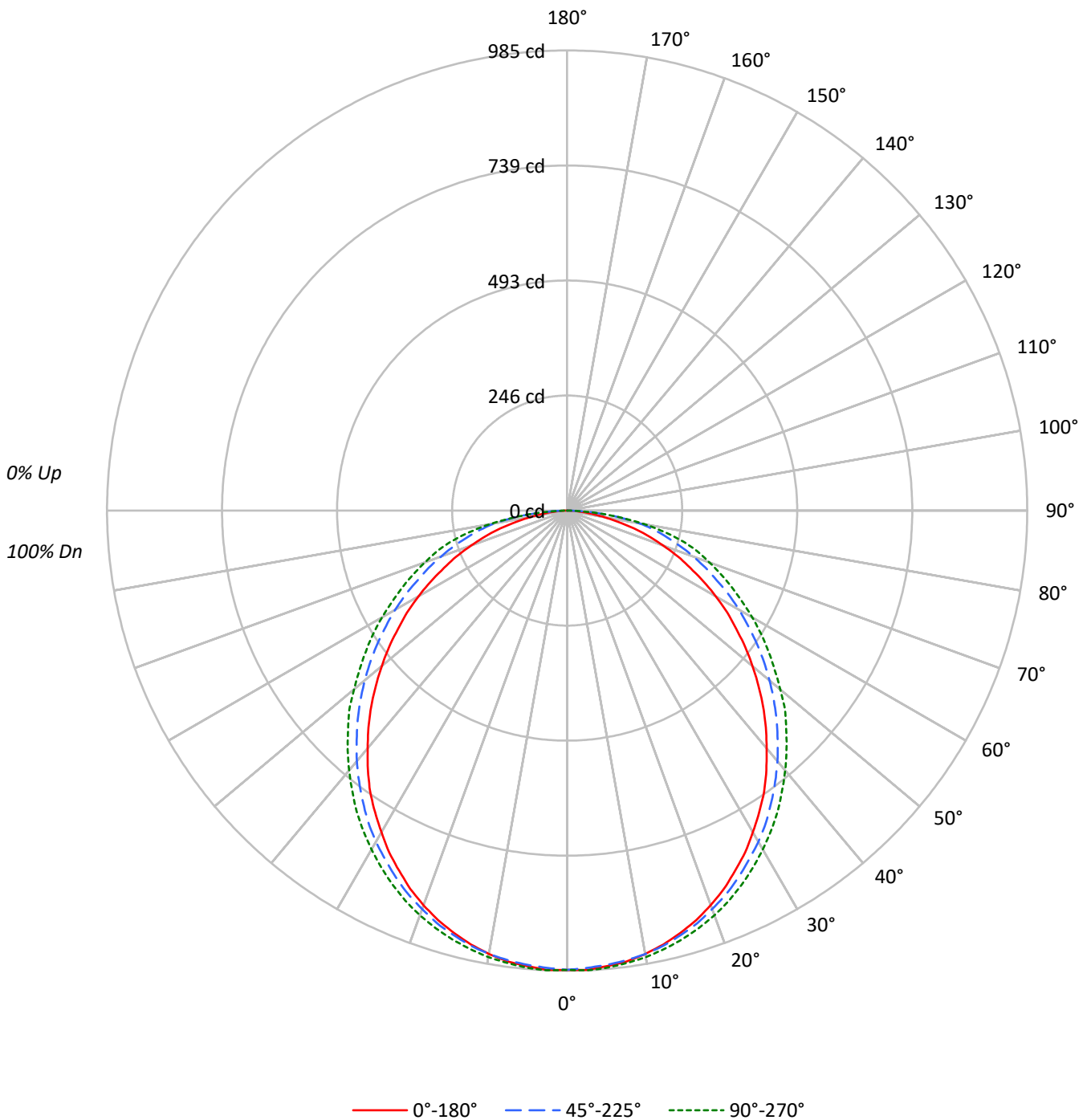
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1323	1323	1323
5°	1322	1318	1327
10°	1317	1317	1326
15°	1304	1310	1324
20°	1287	1300	1320
25°	1263	1287	1312
30°	1235	1272	1301
35°	1208	1251	1291
40°	1166	1230	1276
45°	1128	1206	1262
50°	1085	1184	1247
55°	1036	1162	1235
60°	988	1143	1232
65°	926	1124	1240
70°	857	1129	1273
75°	767	1151	1345
80°	620	1220	1316
85°	466	1070	1044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.1	3.3
10°-20°	266.0	9.5
20°-30°	399.8	14.3
30°-40°	476.2	17.0
40°-50°	487.4	17.4
50°-60°	438.8	15.7
60°-70°	344.6	12.3
70°-80°	223.7	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°	758.9	27.1
0°-40°	1235.1	44.1
0°-60°	2161.4	77.2
0°-90°	2798.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2798.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	979	981	976	982	982	93
15°	936	939	941	949	950	264
25°	851	858	867	881	884	392
35°	735	744	762	780	786	459
45°	593	607	634	658	663	457
55°	442	461	495	521	526	396
65°	291	313	353	382	389	289
75°	148	176	221	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°	983.2	983.2	983.2	983.2	983.2
2.5°	984.1	984.1	979.7	984.1	985.0
5°	978.8	980.6	976.1	981.5	982.3
7.5°	973.5	973.5	970.8	976.1	977.0
10°	963.7	964.6	963.7	969.9	970.8
12.5°	951.2	953.0	953.9	960.1	961.0
15°	936.1	938.8	940.6	948.6	950.3
17.5°	919.2	921.9	926.3	935.2	937.0
20°	898.8	902.3	907.7	919.2	921.9
22.5°	876.6	880.1	889.0	899.7	904.1
25°	850.8	857.9	866.8	881.0	883.7
27.5°	825.0	831.2	842.8	857.9	861.4
30°	794.8	804.5	818.8	833.9	837.4
32.5°	765.4	775.2	792.1	808.1	812.5
35°	735.2	744.1	761.9	780.5	785.9
37.5°	700.5	712.1	731.6	750.3	755.7
40°	664.1	678.3	700.5	720.1	726.3
42.5°	629.4	644.5	666.8	688.1	695.2
45°	593.0	607.2	633.9	657.9	663.2
47.5°	555.6	571.6	600.1	624.1	633.0
50°	518.3	535.2	565.4	590.3	595.6
52.5°	481.0	498.7	530.7	557.4	560.1
55°	441.8	461.4	495.2	521.0	526.3
57.5°	406.3	423.2	459.6	486.3	492.5
60°	367.2	385.8	424.9	449.8	457.8
62.5°	329.8	349.4	390.3	415.2	422.3
65°	290.7	312.9	352.9	382.3	389.4
67.5°	256.9	278.3	320.9	349.4	356.5
70°	217.8	241.8	287.1	316.5	323.6
72.5°	184.0	208.9	254.3	282.7	293.4
75°	147.6	176.0	221.4	251.6	258.7
77.5°	112.0	144.9	191.1	214.2	214.2
80°	80.0	114.7	157.4	168.0	169.8
82.5°	52.5	86.2	116.5	115.6	115.6
85°	30.2	56.0	69.3	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)