

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: P389693

Luminaire Tested: **24CZ2-30VHE-S-UNV-L940-CD1-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: P389693
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-L940-CD1-U
Description: 2x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2702.6 lumens
Efficiency: N/A
Efficacy: 132.5 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

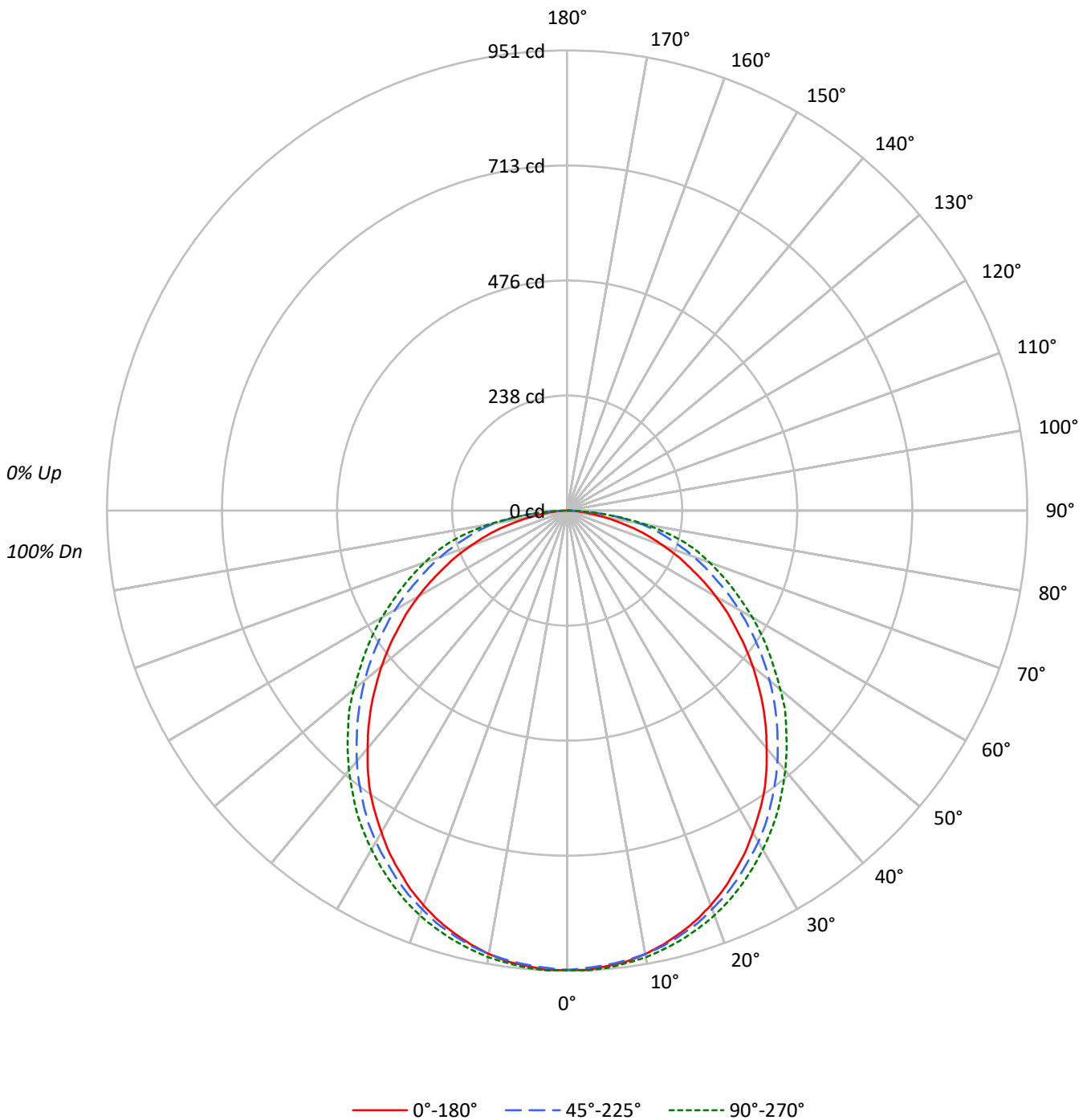
Input Watts (W): 20.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1277	1277	1277
5°	1276	1273	1281
10°	1271	1271	1281
15°	1259	1265	1278
20°	1243	1255	1275
25°	1220	1243	1267
30°	1192	1228	1256
35°	1166	1208	1247
40°	1126	1188	1232
45°	1090	1165	1219
50°	1048	1143	1204
55°	1001	1122	1192
60°	954	1104	1190
65°	894	1085	1197
70°	827	1091	1229
75°	741	1111	1299
80°	599	1177	1271
85°	451	1034	1007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.9	3.3
10°-20°	256.8	9.5
20°-30°	386.1	14.3
30°-40°	459.9	17.0
40°-50°	470.7	17.4
50°-60°	423.7	15.7
60°-70°	332.8	12.3
70°-80°	216.0	8.0
80°-90°	66.8	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°	732.8	27.1
0°-40°	1192.7	44.1
0°-60°	2087.1	77.2
0°-90°	2702.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2702.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	945	947	943	948	949	90
15°	904	906	908	916	918	255
25°	822	828	837	851	853	378
35°	710	718	736	754	759	443
45°	573	586	612	635	640	441
55°	427	446	478	503	508	382
65°	281	302	341	369	376	279
75°	142	170	214	243	250	151
85°	29	54	67	65	65	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	949.4	949.4	949.4	949.4	949.4
2.5°	950.3	950.3	946.0	950.3	951.2
5°	945.1	946.9	942.6	947.7	948.6
7.5°	940.0	940.0	937.4	942.6	943.4
10°	930.6	931.4	930.6	936.6	937.4
12.5°	918.5	920.3	921.1	927.1	928.0
15°	903.9	906.5	908.2	916.0	917.7
17.5°	887.6	890.2	894.5	903.1	904.8
20°	867.9	871.3	876.5	887.6	890.2
22.5°	846.4	849.9	858.4	868.7	873.0
25°	821.5	828.4	837.0	850.7	853.3
27.5°	796.6	802.6	813.8	828.4	831.8
30°	767.5	776.9	790.6	805.2	808.7
32.5°	739.1	748.6	764.9	780.3	784.6
35°	709.9	718.5	735.7	753.7	758.9
37.5°	676.5	687.6	706.5	724.5	729.7
40°	641.3	655.0	676.5	695.3	701.4
42.5°	607.8	622.4	643.8	664.4	671.3
45°	572.6	586.3	612.1	635.2	640.4
47.5°	536.5	552.0	579.5	602.6	611.2
50°	500.5	516.8	546.0	570.0	575.2
52.5°	464.4	481.6	512.5	538.2	540.8
55°	426.6	445.5	478.2	503.0	508.2
57.5°	392.3	408.6	443.8	469.6	475.6
60°	354.5	372.6	410.3	434.4	442.1
62.5°	318.5	337.4	376.9	400.9	407.8
65°	280.7	302.2	340.8	369.1	376.0
67.5°	248.1	268.7	309.9	337.4	344.2
70°	210.3	233.5	277.3	305.6	312.5
72.5°	177.7	201.7	245.5	273.0	283.3
75°	142.5	170.0	213.8	242.9	249.8
77.5°	108.2	139.9	184.6	206.9	206.9
80°	77.3	110.7	151.9	162.2	164.0
82.5°	50.6	83.3	112.5	111.6	111.6
85°	29.2	54.1	67.0	65.2	65.2
87.5°	11.2	22.3	24.0	24.0	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)