

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: P272125

Luminaire Tested: **24CZ2-30HE-S-UNV-L930-CD1-U**

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: P272125
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-L930-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

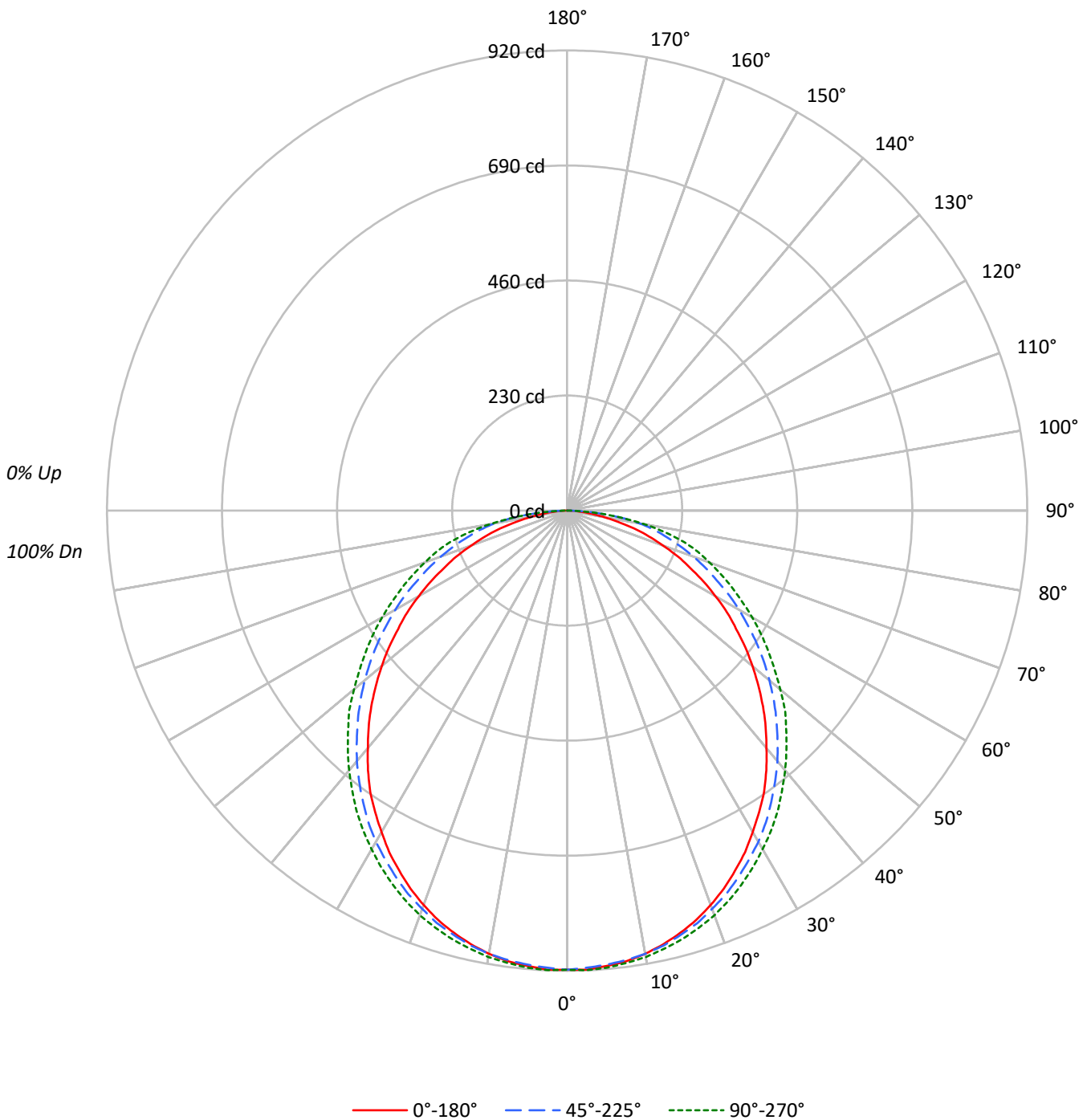
Lumens per Lamp: N/A
Luminaire Lumens: 2613.0 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 22.4
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°	1235	1235	1235
5°	1234	1231	1239
10°	1229	1229	1238
15°	1217	1223	1236
20°	1201	1213	1232
25°	1179	1201	1225
30°	1153	1188	1215
35°	1127	1168	1205
40°	1089	1149	1191
45°	1053	1126	1178
50°	1013	1105	1164
55°	968	1084	1153
60°	922	1068	1150
65°	864	1049	1157
70°	800	1055	1188
75°	716	1075	1255
80°	579	1138	1228
85°	435	999	974



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	3.3
10°-20°	248.3	9.5
20°-30°	373.3	14.3
30°-40°	444.6	17.0
40°-50°	455.1	17.4
50°-60°	409.7	15.7
60°-70°	321.7	12.3
70°-80°	208.8	8.0
80°-90°	64.6	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°	708.5	27.1
0°-40°	1153.1	44.1
0°-60°	2017.9	77.2
0°-90°	2613.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2613.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	914	916	911	916	917	87
15°	874	876	878	886	887	246
25°	794	801	809	822	825	366
35°	686	695	711	729	734	428
45°	554	567	592	614	619	427
55°	412	431	462	486	491	370
65°	271	292	330	357	364	270
75°	138	164	207	235	242	146
85°	28	52	65	63	63	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.0	918.0	918.0	918.0	918.0
2.5°	918.8	918.8	914.6	918.8	919.6
5°	913.8	915.5	911.3	916.3	917.1
7.5°	908.8	908.8	906.3	911.3	912.2
10°	899.7	900.5	899.7	905.5	906.3
12.5°	888.1	889.7	890.6	896.4	897.2
15°	874.0	876.5	878.1	885.6	887.3
17.5°	858.2	860.7	864.8	873.1	874.8
20°	839.1	842.4	847.4	858.2	860.7
22.5°	818.4	821.7	830.0	839.9	844.1
25°	794.3	800.9	809.2	822.5	825.0
27.5°	770.2	776.0	786.8	800.9	804.3
30°	742.0	751.1	764.4	778.5	781.8
32.5°	714.6	723.7	739.5	754.5	758.6
35°	686.4	694.7	711.3	728.7	733.7
37.5°	654.0	664.8	683.1	700.5	705.5
40°	620.0	633.3	654.0	672.3	678.1
42.5°	587.6	601.7	622.5	642.4	649.0
45°	553.6	566.9	591.8	614.2	619.2
47.5°	518.7	533.7	560.2	582.6	590.9
50°	483.9	499.7	527.9	551.1	556.1
52.5°	449.0	465.6	495.5	520.4	522.9
55°	412.5	430.8	462.3	486.4	491.4
57.5°	379.3	395.1	429.1	454.0	459.8
60°	342.8	360.2	396.7	420.0	427.4
62.5°	307.9	326.2	364.4	387.6	394.2
65°	271.4	292.2	329.5	356.9	363.5
67.5°	239.9	259.8	299.6	326.2	332.8
70°	203.3	225.8	268.1	295.5	302.1
72.5°	171.8	195.0	237.4	263.9	273.9
75°	137.8	164.3	206.7	234.9	241.5
77.5°	104.6	135.3	178.4	200.0	200.0
80°	74.7	107.1	146.9	156.9	158.5
82.5°	49.0	80.5	108.7	107.9	107.9
85°	28.2	52.3	64.7	63.1	63.1
87.5°	10.8	21.6	23.2	23.2	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)