

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: P272131

Luminaire Tested: **24CZ2-30-S-UNV-L940-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: P272131
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-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

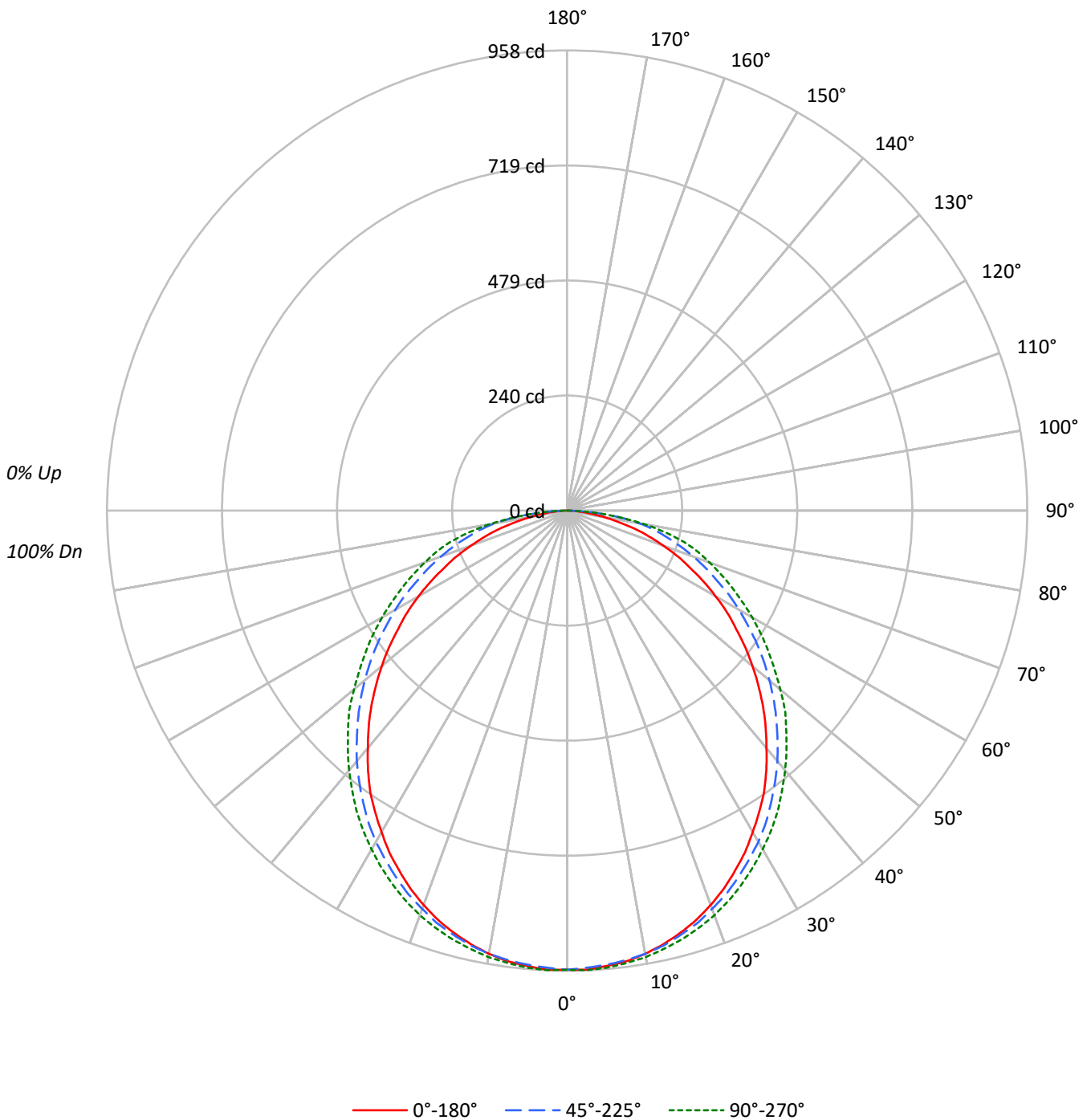
Lumens per Lamp: N/A
Luminaire Lumens: 2721.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.2
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°	1286	1286	1286
5°	1285	1282	1290
10°	1280	1280	1289
15°	1268	1274	1287
20°	1251	1263	1283
25°	1228	1251	1275
30°	1200	1237	1265
35°	1174	1217	1255
40°	1134	1196	1240
45°	1097	1173	1227
50°	1055	1151	1212
55°	1008	1129	1200
60°	961	1112	1198
65°	900	1092	1205
70°	833	1098	1238
75°	746	1119	1307
80°	603	1185	1279
85°	454	1041	1014



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	3.3
10°-20°	258.6	9.5
20°-30°	388.7	14.3
30°-40°	463.0	17.0
40°-50°	473.9	17.4
50°-60°	426.6	15.7
60°-70°	335.0	12.3
70°-80°	217.4	8.0
80°-90°	67.3	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°	737.8	27.1
0°-40°	1200.8	44.1
0°-60°	2101.3	77.2
0°-90°	2721.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2721.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	956	956	956	956	956	
5°	952	953	949	954	955	90
15°	910	913	914	922	924	257
25°	827	834	843	856	859	381
35°	715	723	741	759	764	446
45°	576	590	616	640	645	444
55°	430	449	481	506	512	385
65°	283	304	343	372	379	281
75°	144	171	215	245	252	152
85°	29	54	67	66	66	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	955.9	955.9	955.9	955.9	955.9
2.5°	956.8	956.8	952.4	956.8	957.6
5°	951.6	953.3	949.0	954.2	955.0
7.5°	946.4	946.4	943.8	949.0	949.9
10°	936.9	937.8	936.9	942.9	943.8
12.5°	924.8	926.5	927.4	933.4	934.3
15°	910.1	912.7	914.4	922.2	923.9
17.5°	893.7	896.3	900.6	909.2	911.0
20°	873.8	877.3	882.4	893.7	896.3
22.5°	852.2	855.6	864.3	874.7	879.0
25°	827.1	834.0	842.7	856.5	859.1
27.5°	802.1	808.1	819.3	834.0	837.5
30°	772.7	782.2	796.0	810.7	814.2
32.5°	744.2	753.7	770.1	785.6	790.0
35°	714.8	723.4	740.7	758.8	764.0
37.5°	681.1	692.3	711.3	729.5	734.6
40°	645.6	659.5	681.1	700.1	706.1
42.5°	611.9	626.6	648.2	669.0	675.9
45°	576.5	590.3	616.2	639.6	644.8
47.5°	540.2	555.7	583.4	606.7	615.4
50°	503.9	520.3	549.7	573.9	579.1
52.5°	467.6	484.9	516.0	541.9	544.5
55°	429.6	448.6	481.4	506.5	511.7
57.5°	395.0	411.4	446.8	472.8	478.8
60°	357.0	375.1	413.1	437.3	445.1
62.5°	320.7	339.7	379.4	403.6	410.5
65°	282.6	304.2	343.1	371.6	378.6
67.5°	249.8	270.5	312.0	339.7	346.6
70°	211.8	235.1	279.2	307.7	314.6
72.5°	178.9	203.1	247.2	274.8	285.2
75°	143.5	171.1	215.2	244.6	251.5
77.5°	108.9	140.9	185.8	208.3	208.3
80°	77.8	111.5	153.0	163.4	165.1
82.5°	51.0	83.8	113.2	112.4	112.4
85°	29.4	54.5	67.4	65.7	65.7
87.5°	11.2	22.5	24.2	24.2	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)