

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: P272130

Luminaire Tested: **24CZ2-30-S-UNV-L935-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: P272130
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-L935-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

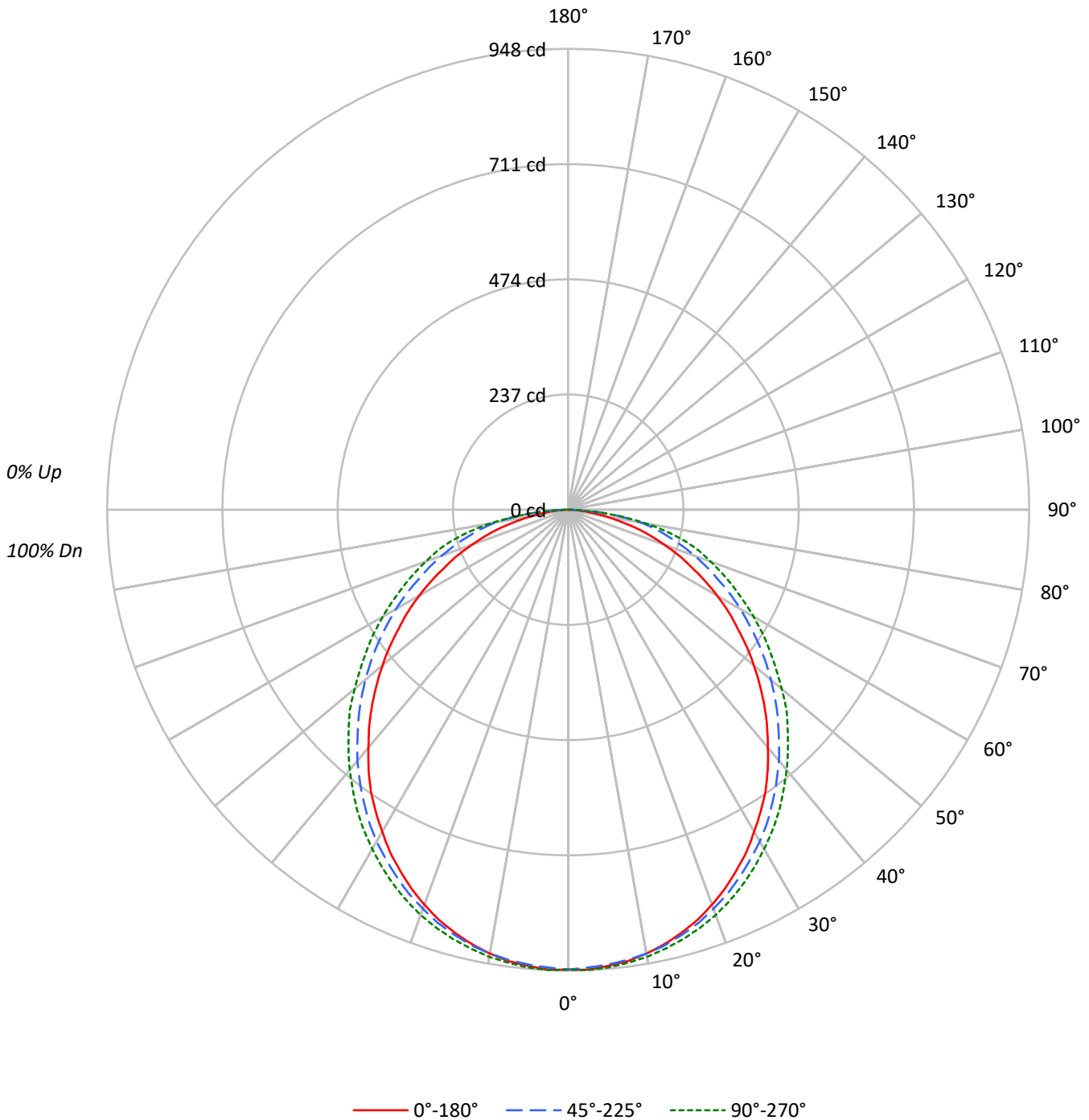
Lumens per Lamp: N/A
Luminaire Lumens: 2693.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	1273	1273	1273
5°	1272	1269	1277
10°	1267	1267	1276
15°	1255	1261	1274
20°	1238	1251	1270
25°	1215	1238	1262
30°	1188	1224	1252
35°	1162	1204	1242
40°	1122	1184	1228
45°	1086	1161	1214
50°	1044	1139	1200
55°	997	1118	1188
60°	951	1100	1185
65°	890	1081	1193
70°	825	1087	1225
75°	738	1107	1294
80°	597	1173	1266
85°	449	1030	1003



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	3.3
10°-20°	255.9	9.5
20°-30°	384.7	14.3
30°-40°	458.3	17.0
40°-50°	469.0	17.4
50°-60°	422.2	15.7
60°-70°	331.6	12.3
70°-80°	215.2	8.0
80°-90°	66.6	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°	730.2	27.1
0°-40°	1188.4	44.1
0°-60°	2079.7	77.2
0°-90°	2693.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2693.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	942	944	939	944	945	89
15°	901	903	905	913	914	254
25°	819	826	834	848	850	377
35°	707	716	733	751	756	441
45°	570	584	610	633	638	440
55°	425	444	476	501	506	381
65°	280	301	340	368	375	278
75°	142	169	213	242	249	150
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°	946.1	946.1	946.1	946.1	946.1
2.5°	946.9	946.9	942.6	946.9	947.8
5°	941.8	943.5	939.2	944.4	945.2
7.5°	936.7	936.7	934.1	939.2	940.1
10°	927.2	928.1	927.2	933.2	934.1
12.5°	915.3	917.0	917.8	923.8	924.7
15°	900.7	903.3	905.0	912.7	914.4
17.5°	884.5	887.0	891.3	899.9	901.6
20°	864.8	868.2	873.4	884.5	887.0
22.5°	843.4	846.8	855.4	865.7	869.9
25°	818.6	825.5	834.0	847.7	850.3
27.5°	793.8	799.8	810.9	825.5	828.9
30°	764.7	774.1	787.8	802.4	805.8
32.5°	736.5	745.9	762.2	777.6	781.8
35°	707.4	716.0	733.1	751.0	756.2
37.5°	674.1	685.2	704.0	722.0	727.1
40°	639.0	652.7	674.1	692.9	698.9
42.5°	605.6	620.2	641.5	662.1	668.9
45°	570.5	584.2	609.9	633.0	638.1
47.5°	534.6	550.0	577.4	600.5	609.0
50°	498.7	514.9	544.0	568.0	573.1
52.5°	462.8	479.9	510.7	536.3	538.9
55°	425.1	444.0	476.5	501.3	506.4
57.5°	390.9	407.2	442.2	467.9	473.9
60°	353.3	371.2	408.9	432.8	440.5
62.5°	317.4	336.2	375.5	399.5	406.3
65°	279.7	301.1	339.6	367.8	374.7
67.5°	247.2	267.7	308.8	336.2	343.0
70°	209.6	232.7	276.3	304.5	311.4
72.5°	177.1	201.0	244.6	272.0	282.3
75°	142.0	169.4	213.0	242.1	248.9
77.5°	107.8	139.4	183.9	206.2	206.2
80°	77.0	110.3	151.4	161.7	163.4
82.5°	50.5	83.0	112.1	111.2	111.2
85°	29.1	53.9	66.7	65.0	65.0
87.5°	11.1	22.2	24.0	24.0	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)