

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: P272127

Luminaire Tested: **24CZ2-30HE-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: P272127
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-L940-CD1-U
Description: 2'x4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

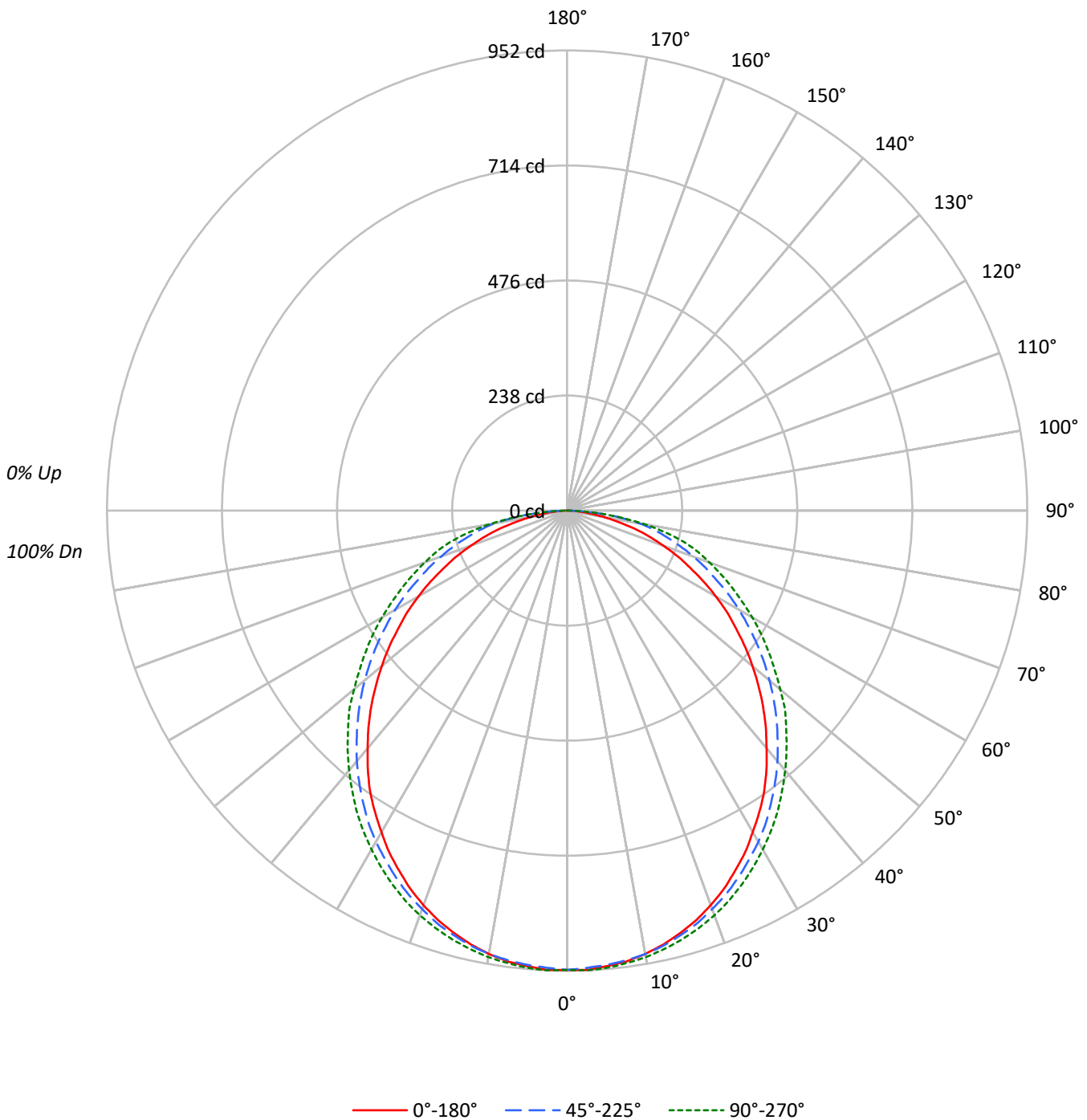
Lumens per Lamp: N/A
Luminaire Lumens: 2705.0 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	1279	1279	1279
5°	1278	1274	1282
10°	1273	1273	1282
15°	1260	1266	1279
20°	1244	1256	1276
25°	1221	1244	1268
30°	1193	1229	1258
35°	1167	1209	1248
40°	1127	1189	1233
45°	1091	1166	1220
50°	1048	1144	1205
55°	1002	1123	1193
60°	955	1105	1191
65°	895	1086	1198
70°	828	1092	1231
75°	741	1112	1300
80°	599	1179	1272
85°	451	1034	1008



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.0	3.3
10°-20°	257.1	9.5
20°-30°	386.4	14.3
30°-40°	460.3	17.0
40°-50°	471.1	17.4
50°-60°	424.1	15.7
60°-70°	333.1	12.3
70°-80°	216.2	8.0
80°-90°	66.9	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°	733.4	27.1
0°-40°	1193.7	44.1
0°-60°	2088.9	77.2
0°-90°	2705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	946	948	943	949	949	90
15°	905	907	909	917	918	255
25°	822	829	838	852	854	379
35°	711	719	736	754	760	443
45°	573	587	613	636	641	442
55°	427	446	479	504	509	383
65°	281	302	341	370	376	280
75°	143	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°	950.3	950.3	950.3	950.3	950.3
2.5°	951.1	951.1	946.8	951.1	952.0
5°	946.0	947.7	943.4	948.6	949.4
7.5°	940.8	940.8	938.3	943.4	944.3
10°	931.4	932.2	931.4	937.4	938.3
12.5°	919.4	921.1	921.9	927.9	928.8
15°	904.7	907.3	909.0	916.8	918.5
17.5°	888.4	891.0	895.3	903.9	905.6
20°	868.7	872.1	877.3	888.4	891.0
22.5°	847.2	850.6	859.2	869.5	873.8
25°	822.3	829.1	837.7	851.5	854.1
27.5°	797.3	803.4	814.5	829.1	832.6
30°	768.1	777.6	791.3	805.9	809.4
32.5°	739.8	749.2	765.6	781.0	785.3
35°	710.6	719.2	736.3	754.4	759.5
37.5°	677.1	688.2	707.1	725.2	730.3
40°	641.8	655.6	677.1	696.0	702.0
42.5°	608.3	622.9	644.4	665.0	671.9
45°	573.1	586.8	612.6	635.8	641.0
47.5°	537.0	552.5	580.0	603.2	611.8
50°	500.9	517.2	546.5	570.5	575.7
52.5°	464.8	482.0	512.9	538.7	541.3
55°	427.0	445.9	478.6	503.5	508.7
57.5°	392.7	409.0	444.2	470.0	476.0
60°	354.9	372.9	410.7	434.8	442.5
62.5°	318.8	337.7	377.2	401.3	408.1
65°	281.0	302.4	341.1	369.5	376.3
67.5°	248.3	268.9	310.2	337.7	344.5
70°	210.5	233.7	277.5	305.9	312.8
72.5°	177.9	201.9	245.7	273.2	283.5
75°	142.6	170.1	213.9	243.2	250.0
77.5°	108.3	140.1	184.7	207.1	207.1
80°	77.3	110.8	152.1	162.4	164.1
82.5°	50.7	83.3	112.6	111.7	111.7
85°	29.2	54.1	67.0	65.3	65.3
87.5°	11.2	22.3	24.1	24.1	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)