

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: P272056

Luminaire Tested: **24CZ2-30HE-UNV-L950-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: P272056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30HE-UNV-L950-CD1-U  
Description: 2'x4' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (168) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2732.0 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

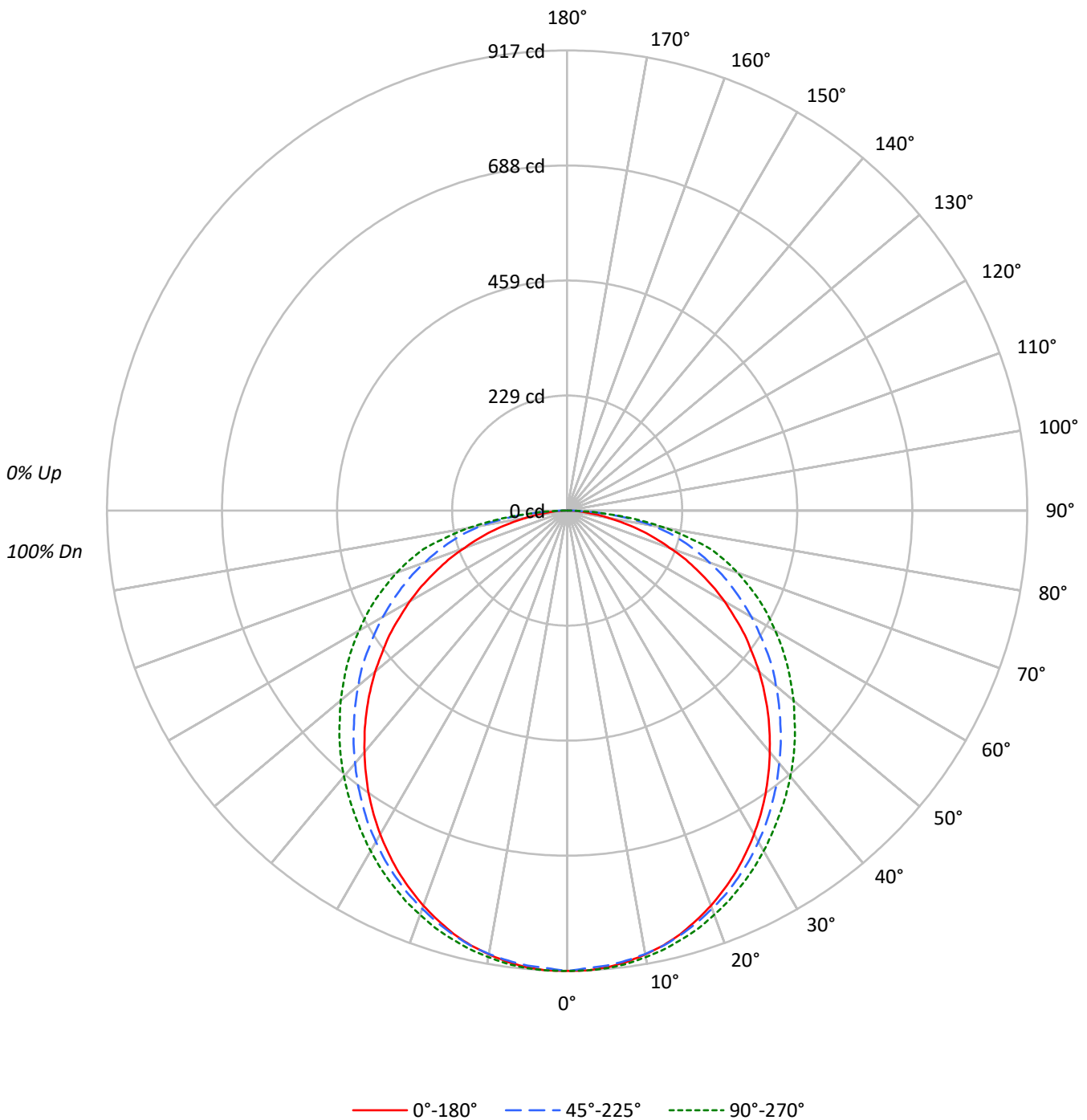
Input Watts (W): 22.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1234	1234	1234
5°	1234	1229	1236
10°	1227	1226	1235
15°	1217	1219	1232
20°	1200	1209	1227
25°	1180	1198	1222
30°	1157	1184	1217
35°	1132	1170	1213
40°	1103	1155	1215
45°	1076	1143	1221
50°	1046	1137	1233
55°	1014	1136	1255
60°	974	1141	1288
65°	923	1158	1344
70°	857	1187	1421
75°	782	1247	1540
80°	643	1342	1540
85°	492	1238	1323



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.8	3.2
10°-20°	247.7	9.1
20°-30°	372.7	13.6
30°-40°	446.6	16.3
40°-50°	465.4	17.0
50°-60°	433.1	15.9
60°-70°	356.7	13.1
70°-80°	242.9	8.9
80°-90°	80.2	2.9
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°	707.1	25.9
0°-40°	1153.8	42.2
0°-60°	2052.3	75.1
0°-90°	2732.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2732.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	914	914	910	914	915	87
15°	874	874	875	884	884	246
25°	795	799	807	821	823	366
35°	689	698	712	731	738	431
45°	565	577	601	631	642	436
55°	432	447	484	522	535	385
65°	290	315	364	407	422	288
75°	150	184	240	283	296	159
85°	32	62	80	86	86	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	917.3	917.3	917.3	917.3	917.3
2.5°	917.3	917.3	912.7	917.3	917.3
5°	913.6	913.6	910.0	914.5	915.4
7.5°	907.2	908.1	904.5	910.0	910.9
10°	898.1	899.0	897.2	902.7	903.6
12.5°	887.2	888.1	888.1	894.5	895.4
15°	873.5	874.4	875.3	883.5	884.4
17.5°	856.2	858.9	860.7	870.8	872.6
20°	837.9	840.7	844.3	855.3	857.1
22.5°	817.0	820.6	827.0	838.8	841.6
25°	795.1	798.7	806.9	820.6	823.3
27.5°	770.5	775.9	786.0	800.6	804.2
30°	744.9	750.4	762.3	777.8	783.2
32.5°	717.6	724.9	738.5	755.9	761.3
35°	689.3	697.5	712.1	731.3	738.5
37.5°	659.2	668.3	685.7	706.6	715.8
40°	628.2	639.2	657.4	682.0	692.0
42.5°	597.2	607.3	630.0	656.5	667.4
45°	565.3	577.2	600.9	631.0	641.9
47.5°	532.5	544.3	572.6	604.5	614.5
50°	499.7	511.5	543.4	577.2	589.0
52.5°	464.1	479.6	516.1	549.8	561.7
55°	432.2	446.8	484.2	522.5	535.2
57.5°	395.7	413.0	454.1	494.2	507.9
60°	362.0	380.2	424.0	465.0	478.7
62.5°	327.3	347.4	393.9	435.8	451.3
65°	289.9	314.6	363.8	406.7	422.2
67.5°	256.2	281.7	333.7	377.5	391.2
70°	217.9	248.9	301.8	345.6	361.1
72.5°	185.1	216.1	271.7	314.6	330.1
75°	150.4	184.2	239.8	282.7	296.3
77.5°	115.8	153.2	208.8	241.6	246.2
80°	83.0	122.2	173.2	192.4	198.8
82.5°	58.4	93.9	127.7	140.4	144.1
85°	31.9	62.0	80.2	85.7	85.7
87.5°	13.7	26.4	31.9	32.8	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)