

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: P345078

Luminaire Tested: **24CZ-30SE-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345078
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1905-313-5)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-30SE-L830-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2571.1 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

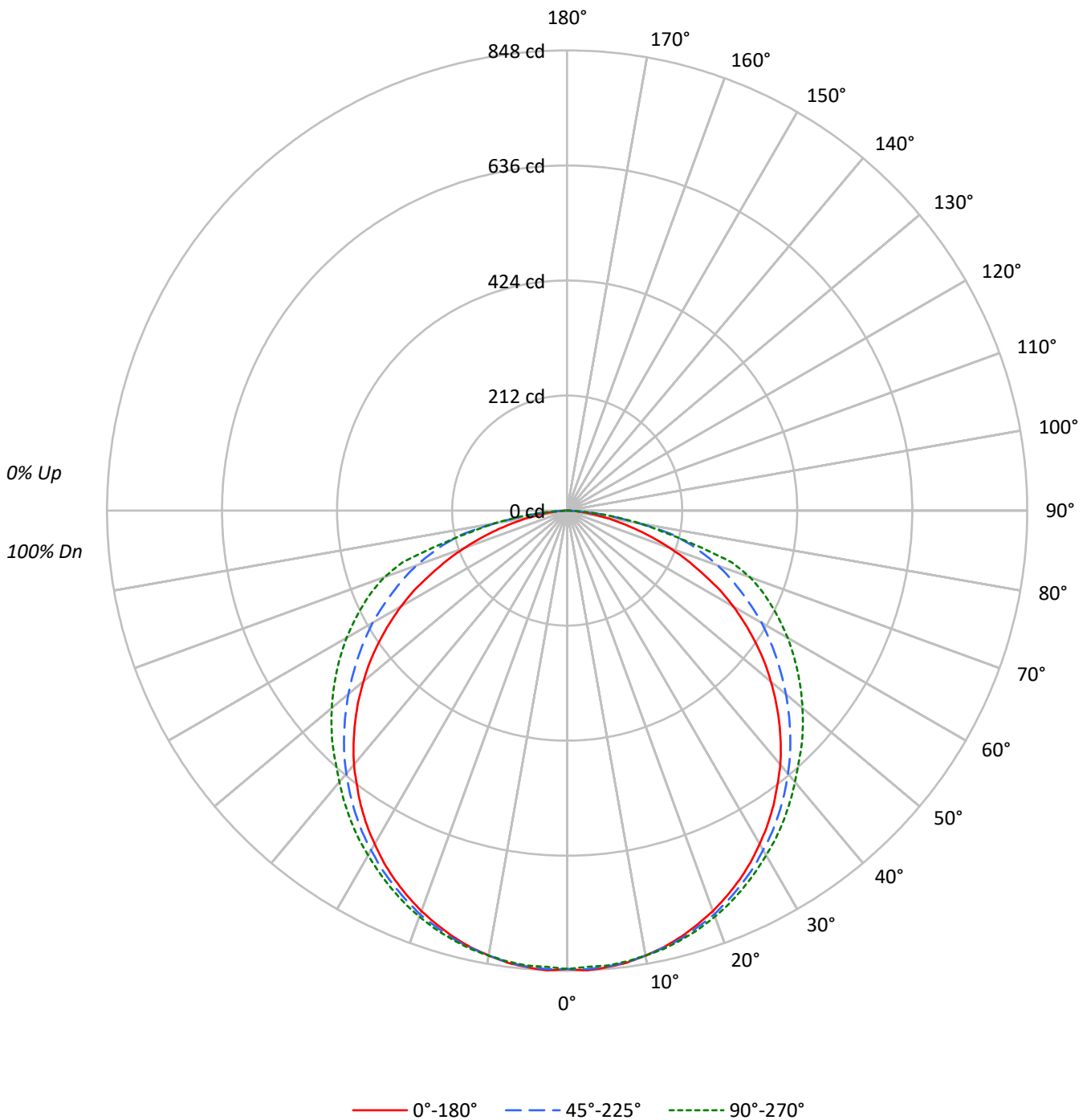
Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	74	81	76	72	77	74	70	68
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	41	34	48	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	31	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°	1137	1137	1137
5°	1141	1140	1137
10°	1138	1138	1138
15°	1132	1137	1140
20°	1124	1134	1140
25°	1115	1128	1140
30°	1102	1123	1140
35°	1089	1118	1143
40°	1074	1112	1147
45°	1052	1106	1163
50°	1026	1102	1185
55°	995	1103	1217
60°	951	1114	1263
65°	880	1125	1325
70°	793	1161	1408
75°	670	1197	1260
80°	521	1024	1058
85°	374	698	611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.1	3.1
10°-20°	229.9	8.9
20°-30°	349.7	13.6
30°-40°	424.8	16.5
40°-50°	448.4	17.4
50°-60°	421.3	16.4
60°-70°	346.8	13.5
70°-80°	218.5	8.5
80°-90°	51.6	2.0
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°	659.7	25.7
0°-40°	1084.5	42.2
0°-60°	1954.2	76.0
0°-90°	2571.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2571.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	845	845	845	845	845	
5°	845	840	844	843	842	80
15°	813	810	816	818	818	229
25°	751	750	760	764	768	346
35°	663	666	681	690	696	415
45°	553	562	582	598	611	426
55°	424	440	470	503	519	379
65°	276	303	354	399	416	275
75°	129	168	230	251	242	138
85°	24	41	45	42	40	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	844.8	844.8	844.8	844.8	844.8
2.5°	848.1	842.6	845.9	844.8	841.5
5°	844.8	840.4	843.7	842.6	841.5
7.5°	840.4	835.9	839.3	838.1	838.1
10°	832.6	829.3	832.6	832.6	832.6
12.5°	823.8	820.5	824.9	826.0	827.1
15°	812.8	809.5	816.1	818.3	818.3
17.5°	799.6	797.4	804.0	806.2	808.4
20°	785.3	784.2	791.9	794.1	796.3
22.5°	768.8	768.8	776.5	778.7	783.1
25°	751.1	750.0	760.0	764.4	767.7
27.5°	731.3	731.3	742.3	747.8	751.1
30°	709.3	711.5	722.5	729.1	733.5
32.5°	687.3	689.5	702.7	710.4	715.9
35°	663.0	666.3	680.7	689.5	696.1
37.5°	636.6	642.1	657.5	667.4	675.1
40°	611.3	615.7	633.3	644.3	653.1
42.5°	582.6	590.3	608.0	621.2	631.1
45°	552.9	561.7	581.5	598.0	611.3
47.5°	522.1	533.1	554.0	576.0	589.2
50°	490.1	502.2	526.5	552.9	566.1
52.5°	458.2	471.4	497.8	528.7	543.0
55°	424.0	439.5	470.3	503.3	518.7
57.5°	388.8	406.4	441.7	479.1	494.5
60°	353.5	372.3	414.1	451.6	469.2
62.5°	317.2	338.1	383.3	426.2	442.8
65°	276.4	302.9	353.5	398.7	416.3
67.5°	239.0	266.5	324.9	370.1	388.8
70°	201.6	233.5	295.2	340.3	357.9
72.5°	164.1	201.6	262.1	308.4	318.3
75°	128.9	168.5	230.2	251.1	242.3
77.5°	94.7	138.8	193.8	182.8	180.6
80°	67.2	110.1	132.2	133.3	136.6
82.5°	43.0	81.5	85.9	87.0	88.1
85°	24.2	40.8	45.2	41.9	39.6
87.5°	11.0	13.2	11.0	7.7	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)