

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: P260679

Luminaire Tested: **24CZ-LD5-30SE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30SE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2784.3 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

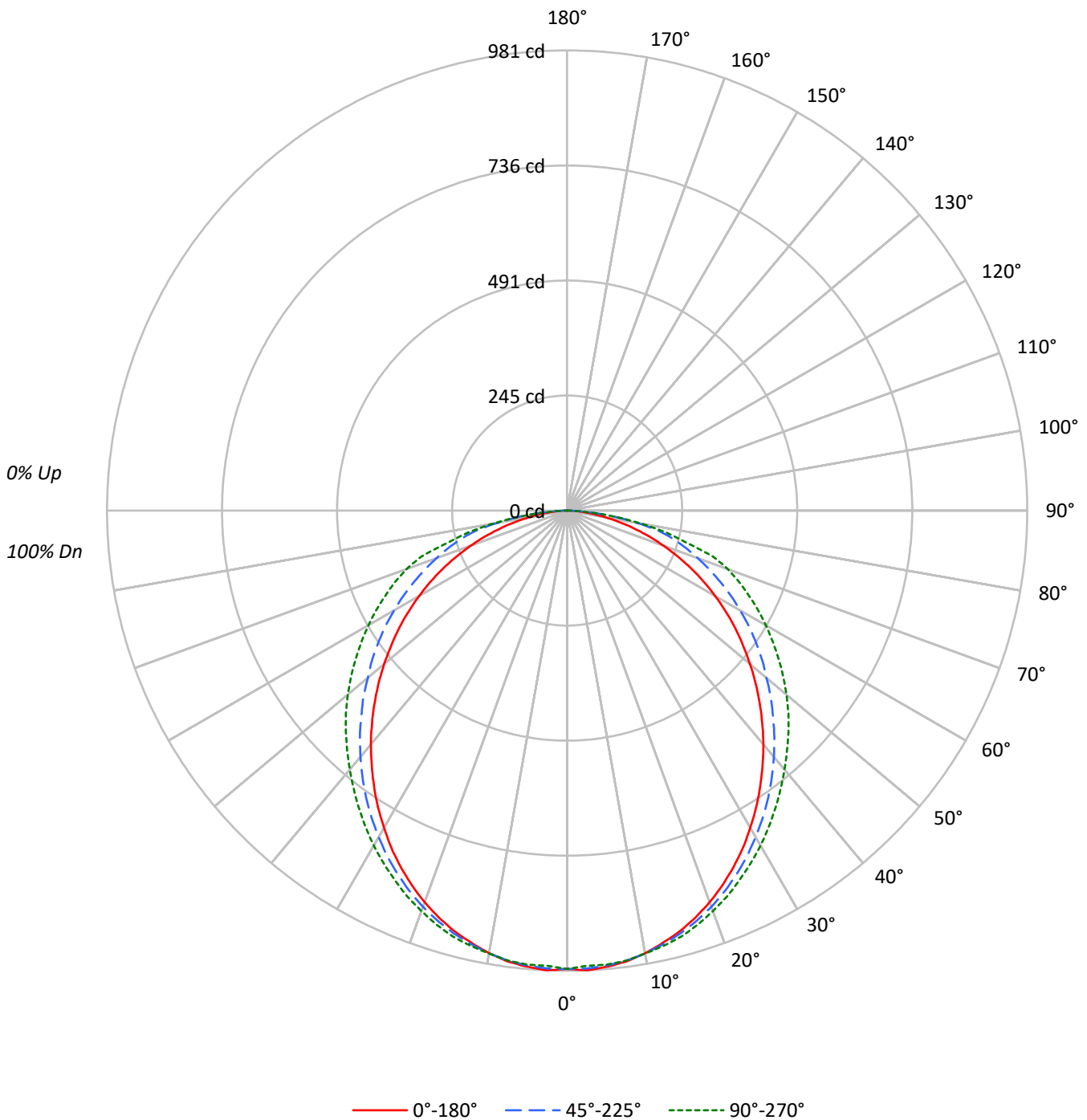
Input Watts (W): 22.327812
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1315	1315	1315
5°	1318	1315	1312
10°	1309	1309	1310
15°	1293	1300	1309
20°	1272	1287	1301
25°	1245	1269	1291
30°	1213	1249	1281
35°	1179	1228	1271
40°	1144	1204	1266
45°	1105	1181	1270
50°	1066	1161	1277
55°	1027	1154	1290
60°	980	1147	1316
65°	929	1147	1360
70°	859	1166	1433
75°	768	1219	1363
80°	642	1167	1248
85°	486	898	854



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.3	3.3
10°-20°	262.8	9.4
20°-30°	392.9	14.1
30°-40°	466.1	16.7
40°-50°	479.7	17.2
50°-60°	440.1	15.8
60°-70°	355.8	12.8
70°-80°	230.9	8.3
80°-90°	63.7	2.3
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°	748.0	26.9
0°-40°	1214.1	43.6
0°-60°	2133.9	76.6
0°-90°	2784.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2784.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	976	970	973	972	971	93
15°	928	925	933	937	940	262
25°	839	840	855	863	869	386
35°	718	724	747	764	774	449
45°	581	590	621	650	667	448
55°	438	451	492	532	550	391
65°	292	309	360	408	427	288
75°	148	175	234	262	262	157
85°	32	53	58	56	55	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	977.1	977.1	977.1	977.1	977.1
2.5°	981.0	973.3	977.1	976.2	971.4
5°	976.2	969.5	973.3	972.4	971.4
7.5°	969.5	962.8	967.6	966.7	967.6
10°	958.1	952.4	958.1	959.0	959.0
12.5°	943.8	939.0	946.6	948.5	950.4
15°	928.5	924.7	933.3	937.1	940.0
17.5°	909.5	906.6	917.1	921.9	925.7
20°	888.5	887.5	899.0	903.7	908.5
22.5°	864.7	864.7	878.0	883.7	890.4
25°	838.9	839.9	855.1	862.7	869.4
27.5°	811.3	812.2	830.3	839.9	847.5
30°	780.8	784.6	803.6	816.0	824.6
32.5°	750.3	755.0	776.0	790.3	799.8
35°	717.8	723.6	747.4	763.6	774.1
37.5°	684.5	691.1	716.9	735.0	747.4
40°	651.1	658.7	685.4	706.4	720.7
42.5°	615.8	624.4	654.0	678.8	694.0
45°	580.6	590.1	620.6	650.2	667.3
47.5°	545.3	556.7	589.1	621.6	639.7
50°	509.1	520.5	554.8	592.0	610.1
52.5°	472.8	486.2	524.3	562.5	580.6
55°	437.6	450.9	491.9	531.9	550.1
57.5°	401.3	414.7	459.5	501.4	519.6
60°	364.2	379.4	426.1	469.0	489.0
62.5°	327.9	344.1	393.7	439.5	458.5
65°	291.7	308.9	360.4	408.0	427.1
67.5°	254.5	274.6	327.9	376.6	396.6
70°	218.3	240.2	296.5	345.1	364.2
72.5°	183.0	206.9	265.0	314.6	326.0
75°	147.8	175.4	234.5	262.2	262.2
77.5°	114.4	144.9	200.2	210.7	216.4
80°	82.9	116.3	150.6	163.0	161.1
82.5°	55.3	88.7	107.7	107.7	104.9
85°	31.5	53.4	58.2	56.2	55.3
87.5°	13.3	20.0	18.1	14.3	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)