

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: P230000

Luminaire Tested: **24CZ-LD5-35SE-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230000
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-LD5-35SE-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2925.0 lumens
Efficiency: N/A
Efficacy: 102.4 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

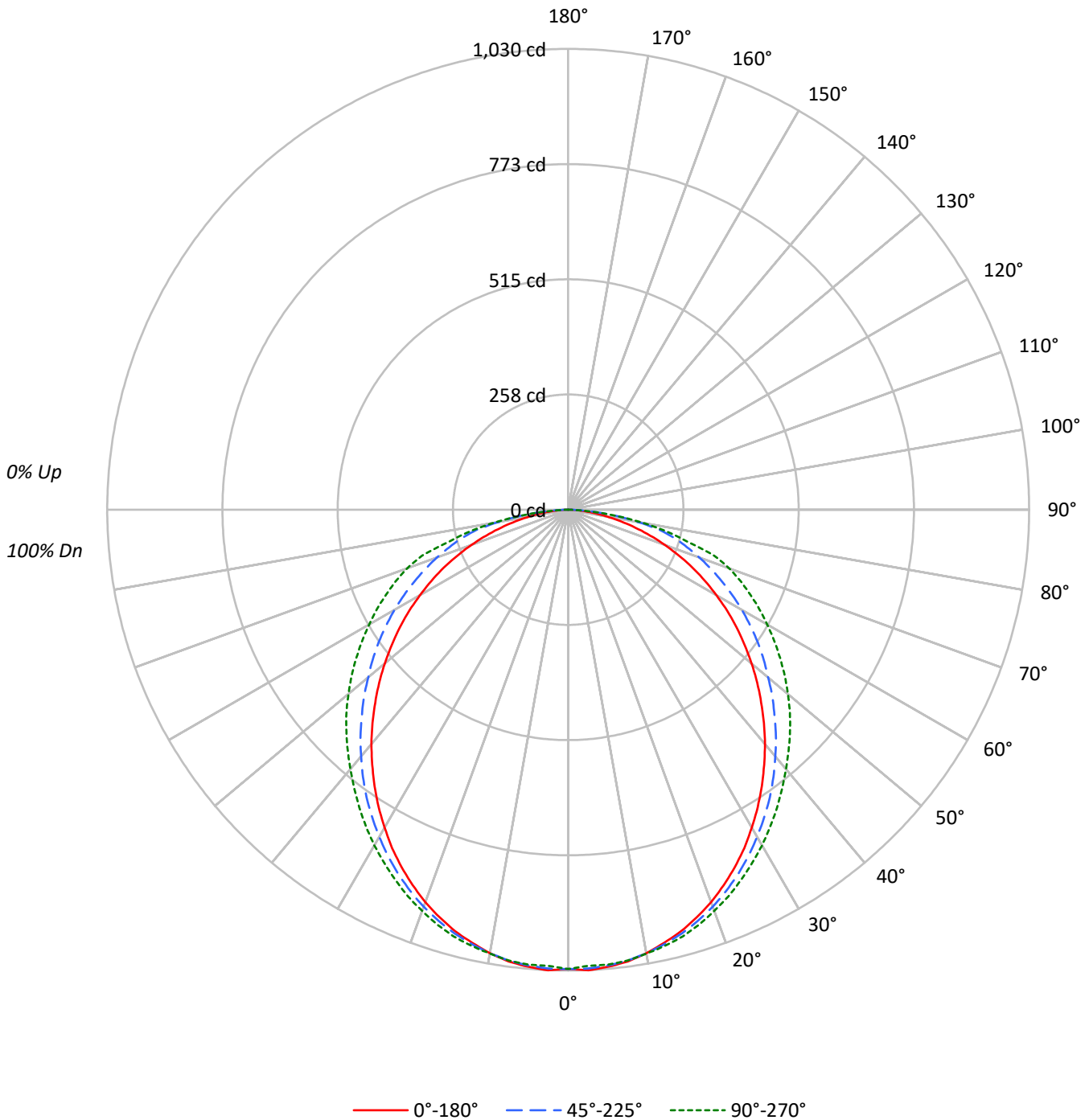
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1381	1381	1381
5°	1385	1381	1378
10°	1375	1375	1376
15°	1359	1366	1376
20°	1336	1352	1367
25°	1308	1334	1356
30°	1274	1312	1346
35°	1239	1290	1336
40°	1201	1265	1330
45°	1161	1241	1334
50°	1119	1220	1342
55°	1078	1212	1356
60°	1030	1205	1383
65°	976	1205	1429
70°	902	1225	1505
75°	807	1281	1432
80°	675	1226	1312
85°	509	943	897



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.0	3.3
10°-20°	276.1	9.4
20°-30°	412.7	14.1
30°-40°	489.6	16.7
40°-50°	504.0	17.2
50°-60°	462.3	15.8
60°-70°	373.8	12.8
70°-80°	242.6	8.3
80°-90°	66.9	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°	785.8	26.9
0°-40°	1275.4	43.6
0°-60°	2241.7	76.6
0°-90°	2925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2925.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1026	1018	1022	1022	1020	97
15°	975	971	980	984	988	275
25°	881	882	898	906	913	406
35°	754	760	785	802	813	472
45°	610	620	652	683	701	471
55°	460	474	517	559	578	411
65°	306	324	379	429	449	303
75°	155	184	246	275	275	165
85°	33	56	61	59	58	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1026.5	1026.5	1026.5	1026.5	1026.5
2.5°	1030.5	1022.5	1026.5	1025.5	1020.5
5°	1025.5	1018.5	1022.5	1021.5	1020.5
7.5°	1018.5	1011.5	1016.5	1015.5	1016.5
10°	1006.5	1000.5	1006.5	1007.5	1007.5
12.5°	991.5	986.5	994.5	996.5	998.5
15°	975.4	971.4	980.5	984.5	987.5
17.5°	955.4	952.4	963.4	968.4	972.4
20°	933.4	932.4	944.4	949.4	954.4
22.5°	908.3	908.3	922.4	928.4	935.4
25°	881.3	882.3	898.3	906.3	913.4
27.5°	852.3	853.3	872.3	882.3	890.3
30°	820.2	824.2	844.3	857.3	866.3
32.5°	788.2	793.2	815.2	830.2	840.2
35°	754.1	760.1	785.2	802.2	813.2
37.5°	719.1	726.1	753.1	772.1	785.2
40°	684.0	692.0	720.1	742.1	757.1
42.5°	647.0	656.0	687.0	713.1	729.1
45°	609.9	619.9	652.0	683.0	701.0
47.5°	572.8	584.9	618.9	653.0	672.0
50°	534.8	546.8	582.9	621.9	641.0
52.5°	496.7	510.8	550.8	590.9	609.9
55°	459.7	473.7	516.8	558.8	577.9
57.5°	421.6	435.6	482.7	526.8	545.8
60°	382.6	398.6	447.7	492.7	513.8
62.5°	344.5	361.5	413.6	461.7	481.7
65°	306.5	324.5	378.6	428.6	448.7
67.5°	267.4	288.4	344.5	395.6	416.6
70°	229.3	252.4	311.5	362.5	382.6
72.5°	192.3	217.3	278.4	330.5	342.5
75°	155.2	184.3	246.4	275.4	275.4
77.5°	120.2	152.2	210.3	221.3	227.3
80°	87.1	122.2	158.2	171.3	169.3
82.5°	58.1	93.1	113.2	113.2	110.2
85°	33.0	56.1	61.1	59.1	58.1
87.5°	14.0	21.0	19.0	15.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)