

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: P188903

Luminaire Tested: **ALT-80-N-BLK-VL-PDH-5W-N06-N**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P188903
Test Lab: Intertek
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: ALT-80-N-BLK-VL-PDH-5W-N06-N
Description: Altus 80, 7500, Wide Distribution, 90-277VAC
Light Source: -
Ballast/Driver: -

Summary

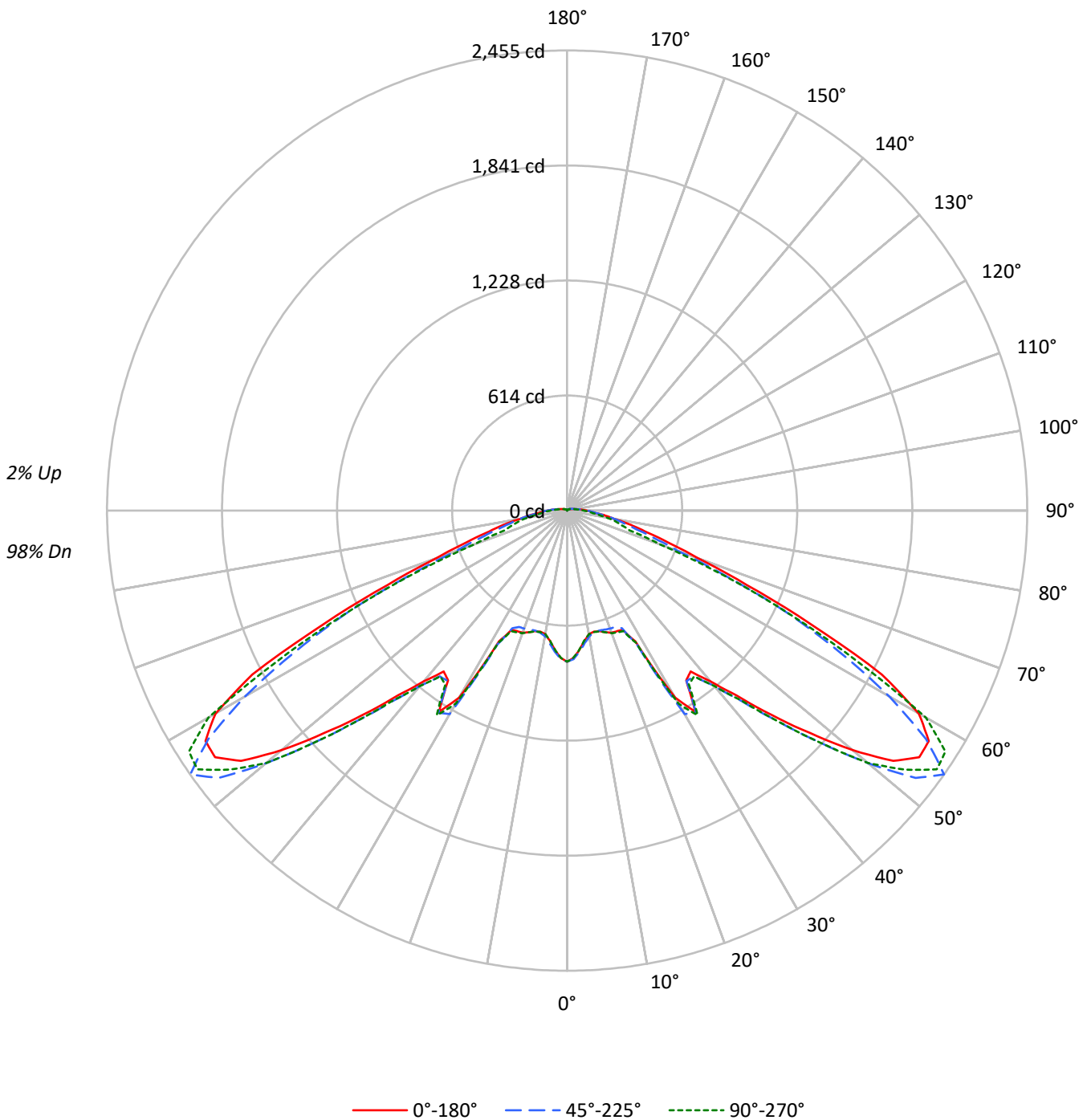
Lumens per Lamp: N/A
Luminaire Lumens: 6804.2 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 2.96 / 3.02 / 2.59
Luminous Opening: Rectangular w/ Sides (W: 0.56' x L: 0.56' x H: 0.08')
CIE Type: Direct

Input Watts (W): 83.6
Input Voltage (V): NR
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	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	106	101	96	91	103	98	94	90	94	90	86	89	86	83	85	83	80	78
2	95	85	77	70	92	83	75	69	79	73	67	75	70	65	72	67	63	61
3	84	72	62	55	81	70	61	54	67	59	53	63	57	51	60	55	50	48
4	75	61	51	43	73	60	50	43	57	49	42	54	47	41	52	45	40	38
5	68	53	43	35	65	52	42	34	49	40	34	47	39	33	45	38	33	30
6	62	46	36	28	59	45	35	28	43	34	28	41	33	27	39	32	27	24
7	56	41	31	24	54	40	30	23	38	29	23	36	28	23	34	28	22	20
8	52	36	27	20	50	35	26	20	34	25	19	32	25	19	31	24	19	17
9	48	33	23	17	46	32	23	17	30	22	17	29	22	16	28	21	16	14
10	44	30	21	15	43	29	20	15	28	20	14	26	19	14	25	19	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27689	27689	27689
5°	25400	25562	25345
10°	22771	22908	22785
15°	22804	22326	22824
20°	24086	22800	24162
25°	24926	23979	25210
30°	42175	44495	43541
35°	42156	40732	43119
40°	47520	46786	48901
45°	65490	64216	67486
50°	90726	90243	95517
55°	113995	114001	119661
60°	119224	100943	121607
65°	89028	74125	81841
70°	53490	40528	38146
75°	37152	28512	25976
80°	27637	23453	23324
85°	22781	18529	19700



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	1.0
10°-20°	191.9	2.8
20°-30°	374.1	5.5
30°-40°	753.7	11.1
40°-50°	1264.6	18.6
50°-60°	2048.1	30.1
60°-70°	1345.7	19.8
70°-80°	424.8	6.2
80°-90°	176.6	2.6
90°-100°	75.9	1.1
100°-110°	36.3	0.5
110°-120°	21.4	0.3
120°-130°	11.6	0.2
130°-140°	5.8	0.1
140°-150°	2.9	0.0
150°-160°	1.3	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	635.2	9.3
0°-40°	1388.9	20.4
0°-60°	4701.7	69.1
0°-90°	6648.8	97.7
90°-120°	133.6	2.0
90°-150°	153.9	2.3
90°-180°	155.0	2.3
0°-180°	6804.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	807	807	807	807	807	
5°	746	752	755	749	745	69
15°	666	674	662	674	667	191
25°	702	715	693	737	710	364
35°	1107	1160	1110	1181	1132	726
45°	1542	1586	1590	1640	1589	1213
55°	2294	2368	2455	2438	2408	1987
65°	1432	1343	1308	1401	1316	1434
75°	430	332	377	445	300	483
85°	152	142	156	163	132	150
90°	104	95	106	112	89	58
95°	68	64	69	71	59	51
105°	31	34	34	35	31	34
115°	19	22	22	22	20	19
125°	10	13	13	14	12	10
135°	6	7	8	8	6	5
145°	4	5	5	5	4	2
155°	2	3	3	3	2	1
165°	0	0	1	0	1	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	806.7	806.7	806.7	806.7	806.7
2.5°	786.4	789.8	792.6	788.9	785.4
5°	746.4	751.9	755.0	748.9	744.8
7.5°	701.5	709.8	714.0	704.6	699.1
10°	669.8	678.3	680.7	675.4	670.2
12.5°	661.6	669.1	666.6	670.1	663.7
15°	666.3	674.1	662.3	674.0	666.9
17.5°	680.4	689.9	666.1	689.5	681.0
20°	693.7	706.0	670.1	708.8	695.9
22.5°	696.6	707.5	671.7	719.1	703.4
25°	702.0	714.8	692.8	737.1	710.0
27.5°	786.8	808.0	805.4	838.1	794.8
30°	1151.9	1235.5	1253.6	1259.4	1189.2
32.5°	1272.3	1329.1	1278.9	1333.6	1294.3
35°	1106.7	1160.4	1109.6	1181.4	1132.0
37.5°	1082.0	1133.3	1115.3	1171.5	1113.6
40°	1187.7	1231.7	1221.2	1278.5	1222.2
42.5°	1336.6	1379.9	1377.2	1429.5	1372.6
45°	1541.9	1586.5	1590.2	1639.7	1588.9
47.5°	1755.8	1835.0	1833.0	1888.2	1833.4
50°	1988.3	2080.6	2096.9	2167.4	2093.3
52.5°	2193.3	2272.8	2342.9	2361.4	2269.8
55°	2293.6	2368.3	2454.7	2437.7	2407.6
57.5°	2287.9	2294.3	2270.7	2384.0	2392.9
60°	2166.5	2089.2	1985.0	2177.1	2209.8
62.5°	1893.0	1757.7	1646.6	1823.1	1753.7
65°	1432.0	1342.9	1308.1	1401.3	1316.4
67.5°	1037.3	909.5	931.1	1056.1	904.4
70°	742.2	551.2	628.0	746.8	529.3
72.5°	561.4	384.3	484.1	551.7	349.3
75°	429.5	332.1	377.1	445.1	300.3
77.5°	346.3	286.0	308.3	364.8	262.4
80°	253.1	231.5	254.6	295.1	213.6
82.5°	207.4	177.4	198.4	217.4	161.9
85°	152.3	141.7	155.7	162.9	131.7
87.5°	127.4	116.5	129.3	136.3	109.3
90°	104.5	95.4	105.7	111.5	89.1
92.5°	84.7	77.6	85.9	90.1	73.0
95°	67.5	63.5	69.3	71.4	59.0
97.5°	54.1	52.3	55.6	57.7	49.1
100°	43.8	44.3	45.5	47.1	42.0
102.5°	36.2	38.8	39.0	39.6	36.4
105°	31.3	34.1	34.0	34.6	31.0
107.5°	27.4	30.2	30.0	30.3	27.6
110°	24.5	27.1	26.9	27.1	24.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	21.8	24.8	23.9	24.9	22.0
115°	19.4	21.9	21.6	22.5	20.0
117.5°	17.5	19.2	19.2	20.3	18.1
120°	14.5	16.8	17.1	17.7	16.4
122.5°	12.3	14.5	14.9	16.2	14.3
125°	10.5	12.6	13.2	13.7	12.2
127.5°	8.9	10.9	11.9	12.1	9.6
130°	8.2	9.2	10.0	10.4	8.5
132.5°	7.2	8.5	8.8	8.7	7.5
135°	6.4	7.2	7.6	7.8	5.9
137.5°	5.5	6.6	6.9	7.2	5.8
140°	4.9	5.8	6.2	6.3	5.5
142.5°	4.2	4.9	5.6	5.4	4.4
145°	3.6	4.8	4.8	4.7	3.8
147.5°	3.2	4.0	4.3	4.5	3.2
150°	2.4	3.7	4.0	3.9	2.8
152.5°	2.8	3.2	3.6	3.1	2.6
155°	2.2	2.6	2.9	2.6	2.4
157.5°	2.0	2.3	2.5	2.5	1.7
160°	1.7	1.8	2.2	1.2	1.1
162.5°	1.0	0.9	1.2	1.1	1.1
165°	0.2	0.4	0.8	0.5	0.6
167.5°	0.0	0.0	0.0	0.4	0.4
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)