

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: NEO-RAY

Report Number: P334713

Luminaire Tested: **S123IW-S1320U935-4F0-1E-UDD-1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334713
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123IW-S1320U935-4F0-1E-UDD-1
Description: DEFINE 3 INDIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER
WALL MOUNT, 1320 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3941.9 lumens
Efficiency: N/A
Efficacy: 153.4 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')
CIE Type: Indirect

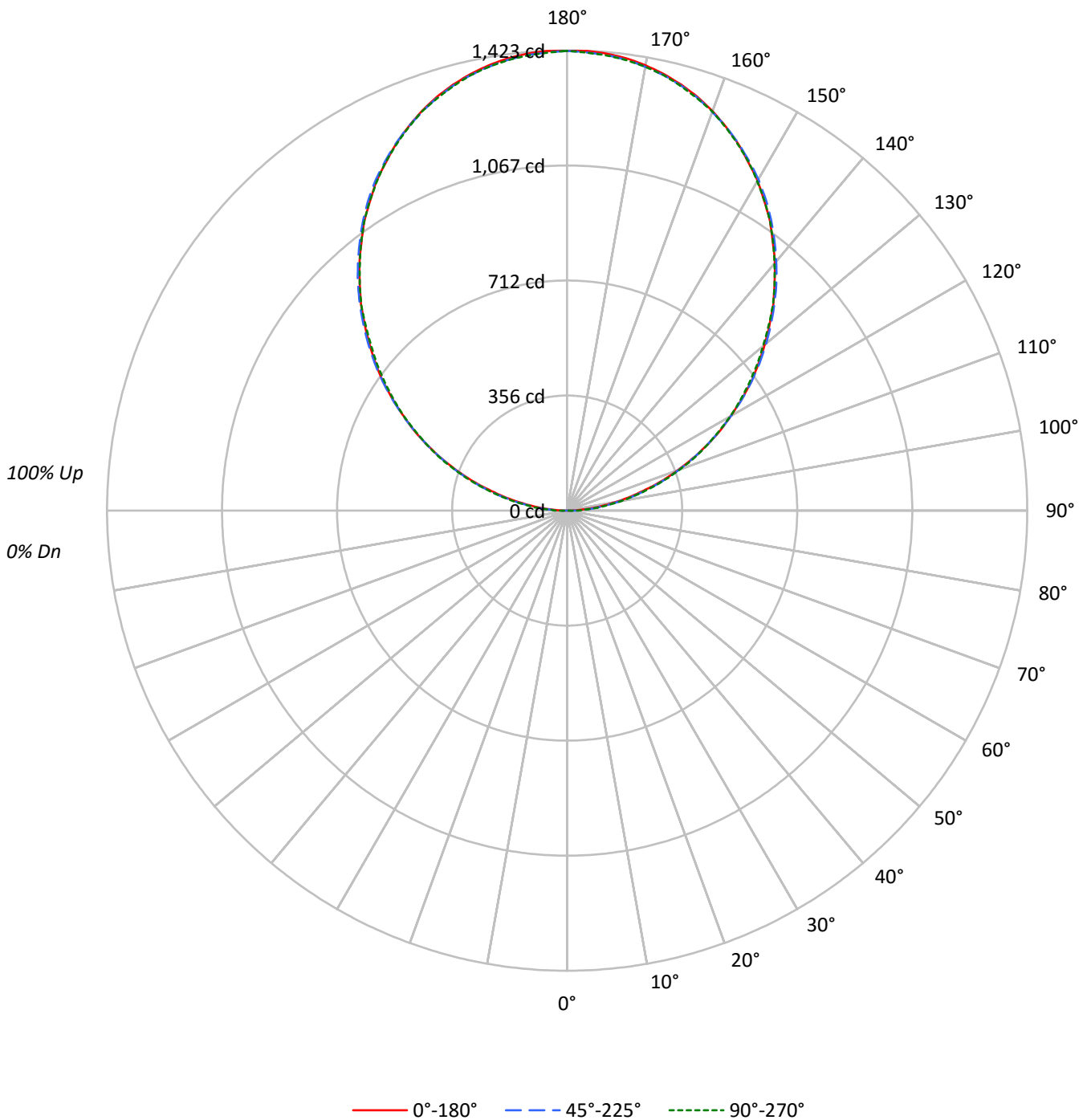
Input Watts (W): 25.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	3.0	0.1
90°-100°	91.5	2.3
100°-110°	277.0	7.0
110°-120°	471.5	12.0
120°-130°	620.3	15.7
130°-140°	697.3	17.7
140°-150°	685.5	17.4
150°-160°	577.1	14.6
160°-170°	384.2	9.7
170°-180°	134.5	3.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	3.0	0.1
90°-120°	840.0	21.3
90°-150°	2843.0	72.1
90°-180°	3939.0	99.9
0°-180°	3941.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	12	27	31	34	5
95°	66	74	83	87	87	73
105°	251	254	264	264	266	269
115°	475	478	476	477	476	470
125°	695	698	696	691	687	619
135°	901	908	907	902	900	694
145°	1093	1096	1099	1098	1093	683
155°	1252	1252	1253	1257	1250	576
165°	1364	1360	1360	1367	1359	385
175°	1418	1414	1414	1420	1413	135
180°	1422	1422	1422	1422	1422	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	1.1	12.3	26.8	31.3	33.5
92.5°	33.5	40.2	46.9	50.3	48.0
95°	65.9	73.7	82.6	87.1	87.1
97.5°	108.3	113.9	120.6	126.2	125.1
100°	151.9	158.6	164.2	167.5	169.7
102.5°	202.1	205.5	213.3	216.6	215.5
105°	251.3	253.5	263.5	263.5	265.8
107.5°	309.3	310.4	314.9	318.3	317.1
110°	362.9	365.2	367.4	371.9	369.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	418.8	419.9	419.9	425.5	425.5
115°	474.6	477.9	475.7	476.8	475.7
117.5°	531.5	532.7	530.4	530.4	527.1
120°	584.0	590.7	585.1	584.0	581.8
122.5°	638.8	643.2	641.0	637.6	634.3
125°	694.6	697.9	695.7	691.2	686.8
127.5°	746.0	752.7	750.4	743.7	739.3
130°	797.3	806.3	802.9	798.4	790.6
132.5°	848.7	857.6	855.4	849.8	844.2
135°	901.2	907.9	906.8	902.3	900.1
137.5°	949.2	954.8	958.1	952.5	949.2
140°	999.4	1005.0	1006.1	1005.0	997.2
142.5°	1045.2	1050.8	1053.0	1051.9	1046.3
145°	1093.2	1095.5	1098.8	1097.7	1093.2
147.5°	1134.6	1139.0	1142.4	1142.4	1135.7
150°	1178.1	1180.3	1182.6	1182.6	1175.9
152.5°	1213.8	1217.2	1218.3	1220.5	1215.0
155°	1251.8	1251.8	1252.9	1257.4	1249.6
157.5°	1284.2	1283.1	1284.2	1288.7	1282.0
160°	1314.4	1312.1	1312.1	1317.7	1313.2
162.5°	1341.2	1337.8	1338.9	1344.5	1336.7
165°	1363.5	1360.1	1360.1	1366.8	1359.0
167.5°	1382.5	1378.0	1379.1	1385.8	1379.1
170°	1398.1	1393.6	1393.6	1401.5	1393.6
172.5°	1410.4	1405.9	1405.9	1412.6	1404.8
175°	1418.2	1413.7	1413.7	1420.4	1412.6
177.5°	1422.7	1418.2	1418.2	1424.9	1417.1
180°	1421.6	1421.6	1421.6	1421.6	1421.6

(END OF REPORT)