

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1031549

Luminaire Tested: S123DIW-B1165D755UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031549
REPORT IS A COMBINATION OF REPORTS P991174 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

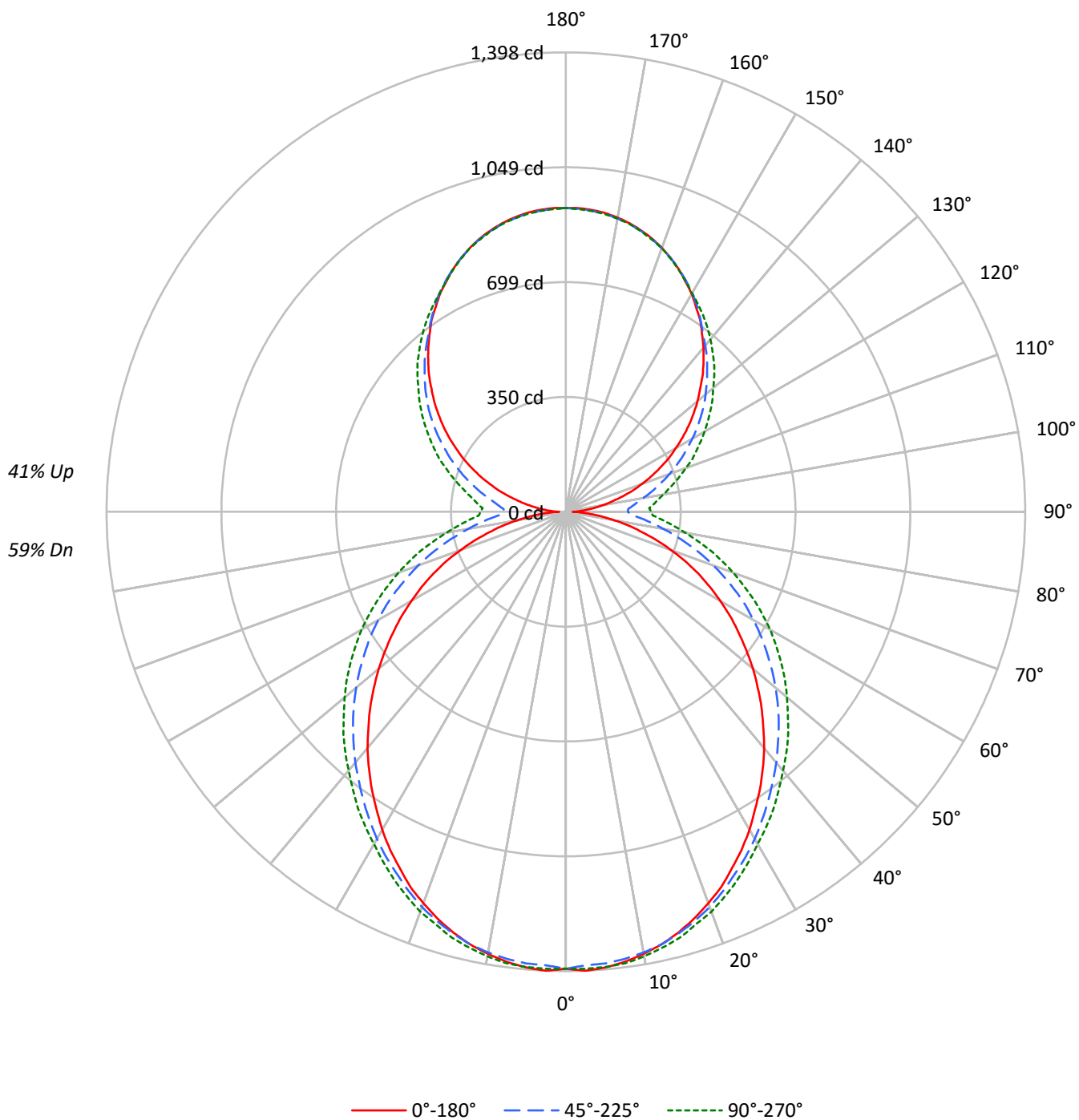
Lumens per Lamp: N/A
Luminaire Lumens: 7236.0 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
Input Voltage (V):
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	102	102	102	102	88	88	88	76	76	76	65	65	65
1	99	94	89	85	92	87	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	56	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	47	49	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	30	33	30	27
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	47	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	44	32	25	21	29	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.8
10°-20°	376.0	5.2
20°-30°	562.3	7.8
30°-40°	671.4	9.3
40°-50°	702.4	9.7
50°-60°	659.2	9.1
60°-70°	550.6	7.6
70°-80°	393.7	5.4
80°-90°	236.2	3.3
90°-100°	206.7	2.9
100°-110°	288.3	4.0
110°-120°	378.8	5.2
120°-130°	444.5	6.1
130°-140°	471.8	6.5
140°-150°	449.6	6.2
150°-160°	375.3	5.2
160°-170°	249.8	3.5
170°-180°	87.5	1.2
0°-30°	1070.2	14.8
0°-40°	1741.6	24.1
0°-60°	3103.2	42.9
0°-90°	4283.7	59.2
90°-120°	873.8	12.1
90°-150°	2239.7	31.0
90°-180°	2952.0	40.8
0°-180°	7236.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	20	102	189	243	260	17
95°	60	124	204	254	269	60
105°	176	213	285	327	342	187
115°	316	336	390	427	438	313
125°	456	458	501	530	537	407
135°	589	592	608	632	638	454
145°	712	712	714	726	729	445
155°	814	814	815	818	812	375
165°	886	884	884	889	884	250
175°	922	919	919	924	918	88
180°	924	924	924	924	924	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	20.4	101.9	188.6	243.0	259.6
92.5°	40.0	109.4	189.5	241.7	253.9
95°	59.5	123.6	203.7	253.5	268.7
97.5°	85.5	143.8	219.3	268.3	282.7
100°	112.3	165.2	238.5	284.6	301.2
102.5°	143.5	188.1	261.4	306.0	320.3
105°	175.5	213.3	285.0	327.4	342.4
107.5°	211.7	244.2	309.3	352.3	365.2
110°	245.1	273.8	335.8	378.1	388.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.4	303.3	360.8	402.3	415.9
115°	316.2	336.5	389.6	426.6	438.0
117.5°	353.2	366.0	416.1	452.4	462.4
120°	385.8	397.7	444.1	478.2	487.4
122.5°	421.4	427.3	472.8	504.0	512.4
125°	456.1	458.3	500.8	529.7	537.4
127.5°	489.5	492.4	528.8	554.8	562.5
130°	522.9	527.2	555.3	581.2	585.3
132.5°	554.8	560.6	581.9	605.5	612.5
135°	588.9	591.8	607.8	632.1	638.2
137.5°	620.2	622.3	635.1	655.7	661.1
140°	651.3	655.0	660.3	682.3	684.8
142.5°	681.1	683.2	684.7	703.7	707.6
145°	712.3	712.3	714.5	725.8	729.0
147.5°	737.7	740.6	742.8	747.3	749.0
150°	766.0	767.5	768.9	768.9	767.6
152.5°	789.2	791.4	792.1	793.6	790.0
155°	813.9	813.9	814.7	817.6	812.5
157.5°	835.0	834.3	835.0	837.9	833.5
160°	854.6	853.1	853.1	856.8	853.9
162.5°	872.0	869.8	870.6	874.2	869.1
165°	886.5	884.4	884.4	888.7	883.6
167.5°	898.9	896.0	896.7	901.1	896.7
170°	909.0	906.1	906.1	911.2	906.1
172.5°	917.0	914.1	914.1	918.5	913.4
175°	922.1	919.2	919.2	923.6	918.5
177.5°	925.0	922.1	922.1	926.5	921.4
180°	924.3	924.3	924.3	924.3	924.3

(END OF REPORT)