

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: P1031525

Luminaire Tested: S123DIW-B1165D755UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031525
REPORT IS A COMBINATION OF REPORTS P991117 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB27-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

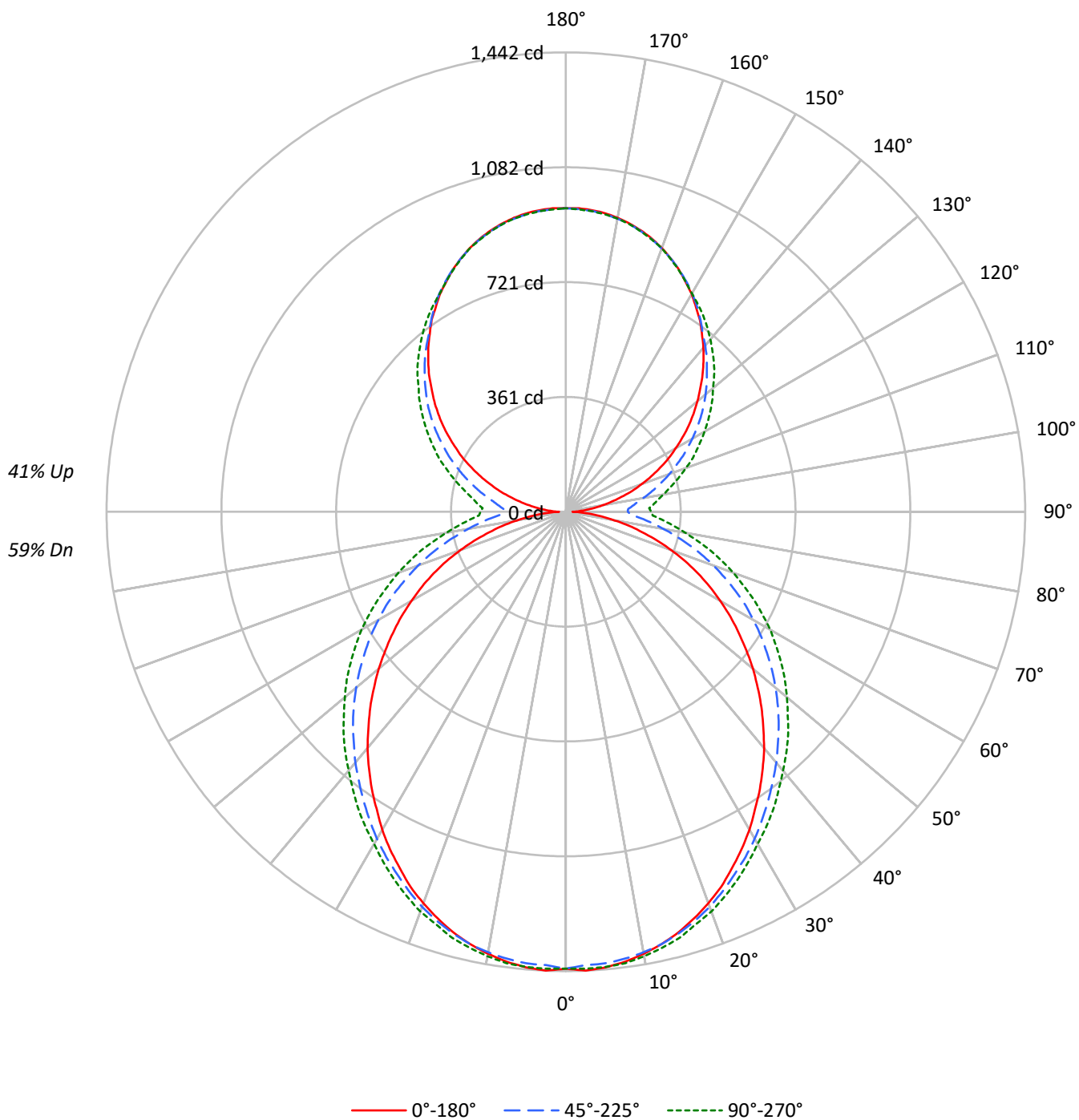
Lumens per Lamp: N/A
Luminaire Lumens: 7461.0 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15434	15434	15434
5°	15477	14982	14969
10°	15332	14576	14464
15°	15129	14128	13929
20°	14841	13628	13354
25°	14487	13066	12758
30°	14123	12556	12160
35°	13716	12022	11673
40°	13328	11534	11158
45°	12898	11061	10734
50°	12471	10593	10273
55°	12000	10112	9850
60°	11539	9621	9416
65°	11064	9096	8908
70°	10348	8509	8384
75°	9449	7839	7845
80°	8393	7161	7228
85°	7348	6611	6785

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12898 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	1.8
10°-20°	387.8	5.2
20°-30°	579.9	7.8
30°-40°	692.3	9.3
40°-50°	724.4	9.7
50°-60°	679.8	9.1
60°-70°	567.8	7.6
70°-80°	406.0	5.4
80°-90°	243.6	3.3
90°-100°	213.1	2.9
100°-110°	297.2	4.0
110°-120°	390.5	5.2
120°-130°	458.3	6.1
130°-140°	486.4	6.5
140°-150°	463.4	6.2
150°-160°	386.8	5.2
160°-170°	257.5	3.5
170°-180°	90.2	1.2
0°-30°	1103.7	14.8
0°-40°	1796.0	24.1
0°-60°	3200.1	42.9
0°-90°	4417.5	59.2
90°-120°	900.9	12.1
90°-150°	2309.0	30.9
90°-180°	3043.0	40.8
0°-180°	7461.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1434	1434	1434	1434	1434	
5°	1436	1432	1423	1436	1434	136
15°	1367	1371	1370	1386	1384	385
25°	1234	1250	1254	1275	1275	569
35°	1062	1087	1107	1131	1137	664
45°	868	906	945	975	987	670
55°	662	714	770	812	825	593
65°	458	519	587	634	650	452
75°	248	322	400	451	470	265
85°	76	155	237	290	306	79
90°	21	105	194	251	268	18
95°	61	128	210	262	277	62
105°	181	220	294	338	353	193
115°	326	347	402	440	452	323
125°	470	472	516	546	554	420
135°	607	610	626	652	658	468
145°	734	734	736	748	751	458
155°	839	839	840	843	838	386
165°	914	912	912	916	911	258
175°	950	948	948	952	947	90
180°	953	953	953	953	953	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1433.9	1433.9	1433.9	1433.9	1433.9
2.5°	1441.7	1437.0	1424.5	1437.0	1435.5
5°	1435.5	1432.3	1423.0	1435.5	1433.9
7.5°	1424.5	1424.5	1415.1	1430.8	1429.2
10°	1408.9	1412.0	1404.2	1419.8	1416.7
12.5°	1390.2	1394.8	1390.2	1404.2	1401.1
15°	1366.7	1371.4	1369.9	1385.5	1383.9
17.5°	1338.6	1348.0	1346.4	1360.5	1357.4
20°	1307.4	1316.7	1319.9	1333.9	1335.5
22.5°	1274.6	1283.9	1288.6	1307.4	1305.8
25°	1234.0	1249.6	1254.3	1274.6	1274.6
27.5°	1194.9	1212.1	1221.5	1238.6	1240.2
30°	1152.7	1173.0	1185.5	1204.3	1204.3
32.5°	1105.9	1129.3	1146.5	1166.8	1171.5
35°	1062.1	1087.1	1107.4	1130.9	1137.1
37.5°	1015.3	1043.4	1066.8	1093.4	1098.1
40°	968.4	996.5	1027.8	1054.3	1060.6
42.5°	916.9	952.8	985.6	1015.3	1024.7
45°	868.5	905.9	945.0	974.7	987.2
47.5°	816.9	859.1	902.8	935.6	945.0
50°	766.9	810.7	859.1	895.0	905.9
52.5°	713.8	760.7	815.4	852.8	866.9
55°	662.3	713.8	770.1	812.2	824.7
57.5°	612.3	665.4	726.3	768.5	782.5
60°	559.2	615.4	679.5	723.2	740.4
62.5°	509.2	567.0	635.7	679.5	695.1
65°	457.7	518.6	587.3	634.2	649.8
67.5°	406.1	470.2	538.9	590.4	602.9
70°	351.4	418.6	493.6	543.6	559.2
72.5°	301.5	368.6	446.7	498.3	513.9
75°	248.4	321.8	399.9	451.4	470.2
77.5°	203.1	276.5	354.6	409.2	423.3
80°	154.6	231.2	312.4	365.5	381.1
82.5°	112.5	190.6	273.3	326.5	342.1
85°	76.5	154.6	237.4	290.5	306.1
87.5°	46.9	125.0	204.6	257.7	273.3
90°	21.0	105.0	194.5	250.6	267.7
92.5°	41.2	112.8	195.4	249.3	261.8
95°	61.4	127.5	210.0	261.5	277.1
97.5°	88.2	148.2	226.1	276.7	291.5
100°	115.9	170.3	245.9	293.5	310.6
102.5°	148.0	193.9	269.5	315.5	330.4
105°	180.9	219.9	293.7	337.5	353.0
107.5°	218.2	251.8	318.9	363.2	376.6
110°	252.6	282.2	346.2	389.8	400.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.1	312.6	372.0	414.8	428.9
115°	325.9	346.9	401.6	439.9	451.6
117.5°	364.1	377.3	428.9	466.4	476.7
120°	397.6	410.0	457.8	492.9	502.4
122.5°	434.3	440.5	487.4	519.6	528.2
125°	470.2	472.5	516.3	546.1	554.0
127.5°	504.7	507.6	545.2	571.9	579.8
130°	539.1	543.5	572.5	599.1	603.3
132.5°	571.9	577.9	599.9	624.3	631.4
135°	607.1	610.1	626.4	651.7	658.0
137.5°	639.3	641.5	654.7	675.9	681.5
140°	671.5	675.2	680.6	703.3	705.9
142.5°	702.2	704.3	705.8	725.3	729.4
145°	734.3	734.2	736.5	748.2	751.4
147.5°	760.4	763.4	765.7	770.4	772.1
150°	789.6	791.1	792.6	792.6	791.2
152.5°	813.6	815.8	816.6	818.1	814.3
155°	839.0	839.0	839.8	842.8	837.5
157.5°	860.7	860.0	860.7	863.7	859.2
160°	880.9	879.4	879.4	883.2	880.2
162.5°	898.9	896.6	897.4	901.1	895.9
165°	913.9	911.6	911.6	916.1	910.9
167.5°	926.6	923.6	924.3	928.8	924.3
170°	937.1	934.1	934.1	939.3	934.1
172.5°	945.3	942.3	942.3	946.8	941.6
175°	950.5	947.5	947.5	952.0	946.8
177.5°	953.5	950.5	950.5	955.0	949.8
180°	952.8	952.8	952.8	952.8	952.8

(END OF REPORT)