

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: P1031494

Luminaire Tested: S123DIW-B1165D460UB27-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031494
REPORT IS A COMBINATION OF REPORTS P991050 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D460UB27-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

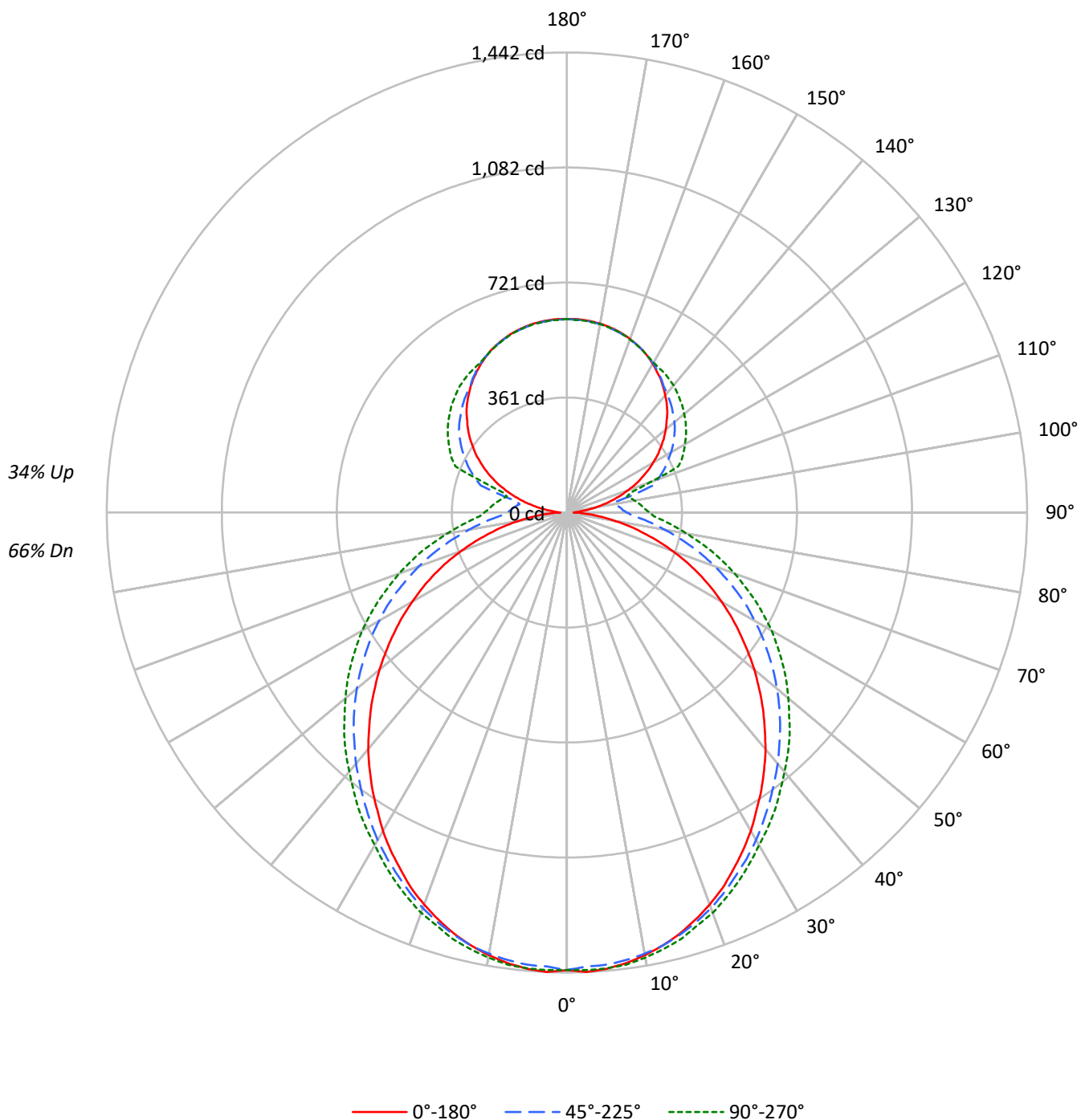
Lumens per Lamp: N/A
Luminaire Lumens: 6668.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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

TEST NUMBER: P1031494

CATALOG NUMBER: S123DIW-B1165D460UB27-4F0-XX-W2A-D

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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71
1	100	95	90	86	94	89	85	82	79	76	73	69	67	65	61	59	57
2	91	82	75	69	85	77	71	66	68	64	59	60	56	53	53	50	47
3	82	72	64	57	77	68	60	55	60	54	49	53	48	44	46	43	40
4	75	63	55	48	70	60	52	46	53	47	42	47	42	38	41	37	34
5	69	56	48	41	64	53	45	39	47	41	36	42	37	33	37	33	29
6	63	51	42	36	59	48	40	34	43	36	31	38	32	28	33	29	26
7	59	46	37	31	55	43	35	30	39	32	27	34	29	25	30	26	23
8	55	41	33	28	51	39	32	27	35	29	24	31	26	22	28	24	20
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	26	21	18
10	48	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

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

TEST NUMBER: P1031494

CATALOG NUMBER: S123DIW-B1165D460UB27-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	2.0
10°-20°	387.8	5.8
20°-30°	579.9	8.7
30°-40°	692.3	10.4
40°-50°	724.4	10.9
50°-60°	679.8	10.2
60°-70°	567.8	8.5
70°-80°	406.0	6.1
80°-90°	242.8	3.6
90°-100°	173.2	2.6
100°-110°	214.9	3.2
110°-120°	327.7	4.9
120°-130°	364.0	5.5
130°-140°	362.5	5.4
140°-150°	325.1	4.9
150°-160°	259.1	3.9
160°-170°	167.2	2.5
170°-180°	57.6	0.9
0°-30°	1103.7	16.6
0°-40°	1796.0	26.9
0°-60°	3200.1	48.0
0°-90°	4416.7	66.2
90°-120°	715.9	10.7
90°-150°	1767.5	26.5
90°-180°	2251.0	33.8
0°-180°	6668.0	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	102	187	242	259	16
95°	45	87	169	220	236	46
105°	147	189	216	180	195	155
115°	260	281	341	383	398	257
125°	360	363	410	444	456	322
135°	445	446	465	494	501	343
145°	511	513	514	527	533	320
155°	562	561	561	563	561	259
165°	592	591	590	594	591	167
175°	606	604	604	608	604	58
180°	606	606	606	606	606	

TEST NUMBER: P1031494

CATALOG NUMBER: S123DIW-B1165D460UB27-4F0-XX-W2A-D

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°	20.8	101.8	187.3	242.2	258.7
92.5°	29.1	93.6	175.7	230.5	244.9
95°	44.7	87.1	168.6	220.2	235.8
97.5°	65.6	109.3	159.7	210.1	226.2
100°	90.2	149.1	150.8	199.7	215.7
102.5°	118.3	167.9	159.8	188.8	205.3
105°	146.7	189.1	215.7	179.8	194.7
107.5°	175.3	212.1	283.0	255.7	210.8
110°	203.9	235.6	303.1	328.8	276.9

TEST NUMBER: P1031494

CATALOG NUMBER: S123DIW-B1165D460UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	232.8	257.7	322.1	365.1	378.3
115°	259.5	281.0	341.3	383.3	397.6
117.5°	287.4	303.1	358.4	399.5	412.5
120°	311.5	323.5	376.3	415.8	426.8
122.5°	337.6	344.0	394.2	430.8	442.2
125°	359.5	363.1	410.2	443.9	455.7
127.5°	383.0	385.0	426.3	458.9	468.9
130°	404.6	406.6	439.7	471.1	479.6
132.5°	423.7	427.3	452.1	482.0	491.6
135°	444.9	446.1	465.0	494.5	501.0
137.5°	462.9	465.0	476.8	504.0	510.9
140°	479.4	482.1	488.0	513.3	520.2
142.5°	496.0	497.1	498.5	520.1	526.6
145°	511.3	512.9	513.8	527.2	533.4
147.5°	524.6	526.9	527.8	533.4	537.3
150°	538.1	539.5	540.4	541.3	543.0
152.5°	550.3	550.7	551.2	553.0	550.7
155°	561.5	560.6	561.1	563.3	560.6
157.5°	570.5	570.5	570.1	572.8	569.2
160°	578.6	578.2	577.7	580.4	577.3
162.5°	586.3	584.9	584.5	587.7	584.9
165°	592.2	590.8	590.4	594.0	590.8
167.5°	597.1	595.3	595.3	598.9	595.3
170°	601.2	599.4	599.4	603.0	599.4
172.5°	603.9	601.6	602.1	605.7	601.6
175°	606.1	603.9	604.3	607.5	603.9
177.5°	607.0	604.8	605.2	608.8	604.3
180°	606.1	606.1	606.1	606.1	606.1

(END OF REPORT)