

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: P1031538

Luminaire Tested: S123DIW-B1165D755UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031538
REPORT IS A COMBINATION OF REPORTS P991158 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D755UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

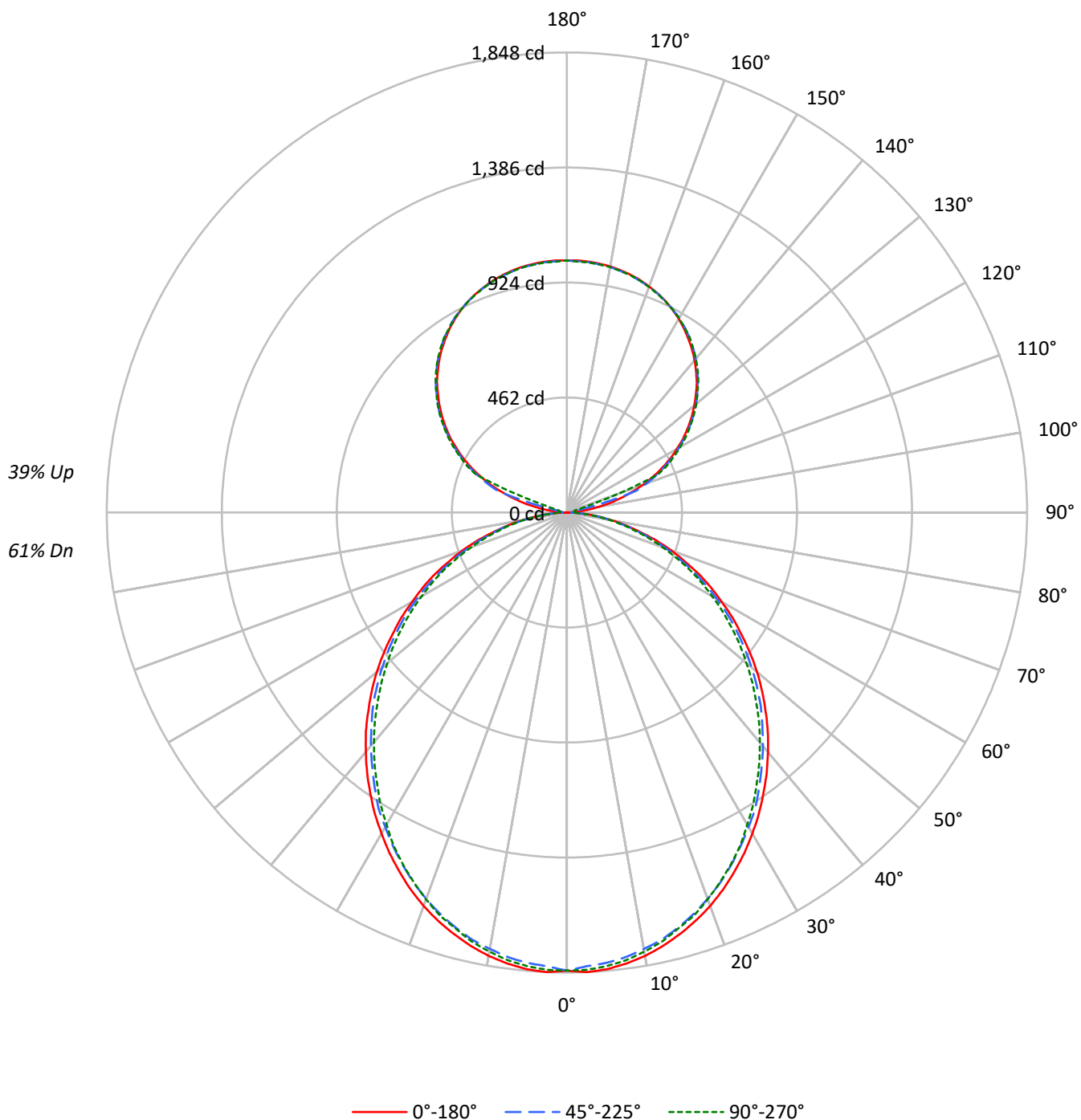
Lumens per Lamp: N/A
Luminaire Lumens: 7876.0 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1031538

CATALOG NUMBER: S123DIW-B1165D755UB35-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1031538

CATALOG NUMBER: S123DIW-B1165D755UB35-4F0-XX-W2A-F

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	60	56	54	51	49	47
3	83	73	66	60	77	69	62	57	61	55	51	53	49	45	45	42	40
4	76	65	57	51	71	61	54	48	54	48	44	47	42	39	41	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	37	33	30
6	64	52	44	38	60	49	42	36	43	37	33	38	33	30	33	29	26
7	60	47	39	33	56	44	37	32	39	33	29	35	30	26	30	26	23
8	55	43	35	29	52	40	33	28	36	30	26	32	27	23	28	24	21
9	52	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19807	19807	19807
5°	19856	19123	19094
10°	19680	18476	18287
15°	19406	17803	17406
20°	19092	17055	16532
25°	18686	16267	15600
30°	18242	15451	14618
35°	17776	14618	13643
40°	17290	13742	12683
45°	16754	12889	11681
50°	16209	11939	10675
55°	15510	10948	9656
60°	14789	9857	8571
65°	14113	8675	7440
70°	13140	7364	6120
75°	11735	5832	4751
80°	10136	4098	3361
85°	7905	2203	1682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16754 cd/sqm

TEST NUMBER: P1031538

CATALOG NUMBER: S123DIW-B1165D755UB35-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	2.2
10°-20°	489.8	6.2
20°-30°	723.4	9.2
30°-40°	844.9	10.7
40°-50°	849.4	10.8
50°-60°	746.1	9.5
60°-70°	555.7	7.1
70°-80°	316.2	4.0
80°-90°	91.9	1.2
90°-100°	35.7	0.5
100°-110°	172.5	2.2
110°-120°	422.8	5.4
120°-130°	536.7	6.8
130°-140°	573.4	7.3
140°-150°	536.2	6.8
150°-160°	432.5	5.5
160°-170°	279.1	3.5
170°-180°	96.2	1.2
0°-30°	1386.7	17.6
0°-40°	2231.6	28.3
0°-60°	3827.2	48.6
0°-90°	4791.0	60.8
90°-120°	631.0	8.0
90°-150°	2277.3	28.9
90°-180°	3085.0	39.2
0°-180°	7876.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1842	1834	1816	1832	1829	175
15°	1753	1747	1726	1739	1729	494
25°	1592	1582	1562	1563	1558	733
35°	1376	1367	1346	1337	1329	861
45°	1128	1122	1101	1082	1074	871
55°	856	854	834	816	808	767
65°	584	576	560	547	543	576
75°	308	302	298	290	285	330
85°	82	79	79	76	76	88
90°	1	8	18	21	23	8
95°	46	15	23	29	29	55
105°	224	232	165	32	33	238
115°	420	425	432	439	442	415
125°	592	598	601	603	604	529
135°	738	742	745	747	745	568
145°	851	856	858	859	859	533
155°	938	936	937	940	936	432
165°	989	986	986	992	986	279
175°	1012	1008	1009	1014	1008	96
180°	1012	1012	1012	1012	1012	

TEST NUMBER: P1031538

CATALOG NUMBER: S123DIW-B1165D755UB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1848.0	1841.7	1824.3	1840.1	1838.5
5°	1841.7	1833.8	1816.4	1832.2	1829.0
7.5°	1827.5	1819.5	1802.1	1816.4	1814.8
10°	1808.5	1800.6	1780.0	1794.2	1791.1
12.5°	1783.2	1776.8	1757.8	1767.3	1765.7
15°	1753.1	1746.8	1726.2	1738.9	1729.4
17.5°	1719.9	1712.0	1691.4	1700.9	1697.7
20°	1681.9	1672.4	1651.8	1658.2	1653.4
22.5°	1639.2	1629.7	1609.1	1613.9	1607.5
25°	1591.7	1582.2	1561.6	1563.2	1558.5
27.5°	1542.7	1533.2	1511.0	1512.6	1507.8
30°	1488.9	1481.0	1458.8	1458.8	1447.7
32.5°	1435.1	1424.0	1408.2	1397.1	1392.3
35°	1376.5	1367.0	1346.5	1337.0	1329.1
37.5°	1318.0	1305.3	1284.8	1273.7	1268.9
40°	1256.3	1246.8	1224.6	1212.0	1205.6
42.5°	1194.6	1183.5	1161.3	1148.7	1142.4
45°	1128.1	1121.8	1101.2	1082.2	1074.3
47.5°	1063.2	1053.8	1034.8	1015.8	1009.5
50°	996.8	988.9	968.3	950.9	941.4
52.5°	927.2	922.4	900.3	886.0	876.5
55°	856.0	854.4	833.8	816.4	808.5
57.5°	789.5	783.2	767.4	751.6	742.1
60°	716.7	715.2	696.2	681.9	674.0
62.5°	651.9	647.1	628.1	613.9	609.2
65°	583.8	575.9	560.1	547.4	542.7
67.5°	511.1	504.7	492.1	481.0	474.7
70°	446.2	436.7	427.2	416.1	408.2
72.5°	378.1	371.8	360.7	351.3	348.1
75°	308.5	302.2	297.5	289.5	284.8
77.5°	246.8	243.7	237.3	231.0	231.0
80°	186.7	182.0	178.8	177.2	177.2
82.5°	128.2	128.2	128.2	125.0	123.4
85°	82.3	79.1	79.1	75.9	75.9
87.5°	41.1	36.4	34.8	33.2	33.2
90°	0.8	8.3	18.0	21.1	22.6
92.5°	17.3	12.8	19.5	24.8	25.6
95°	45.9	15.0	23.3	28.6	28.6
97.5°	83.5	62.4	24.1	30.1	30.8
100°	127.1	142.1	24.8	30.8	31.6
102.5°	176.7	186.4	55.6	30.8	32.3
105°	224.0	232.3	164.6	31.6	33.1
107.5°	274.4	281.2	292.5	176.7	78.2
110°	324.8	330.8	339.1	314.3	206.7

TEST NUMBER: P1031538

CATALOG NUMBER: S123DIW-B1165D755UB35-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	372.9	378.2	386.4	393.2	391.7
115°	420.3	424.8	431.5	439.1	442.1
117.5°	466.9	472.1	475.9	481.9	482.7
120°	509.7	516.5	518.7	524.8	524.8
122.5°	553.3	558.6	561.6	565.4	566.1
125°	592.4	598.4	601.4	603.0	604.5
127.5°	631.5	637.5	641.3	643.6	642.0
130°	667.6	673.6	676.6	679.6	678.1
132.5°	702.2	708.2	710.5	713.5	711.2
135°	737.5	742.0	745.0	747.3	745.0
137.5°	767.6	773.6	775.1	778.9	777.4
140°	797.7	802.2	804.4	807.4	805.9
142.5°	825.5	830.0	832.3	834.5	832.3
145°	851.1	856.3	857.8	859.3	859.3
147.5°	875.9	879.6	881.1	882.6	878.9
150°	898.4	900.7	902.2	903.7	901.4
152.5°	918.7	919.5	920.2	923.2	919.5
155°	937.5	936.0	936.8	940.5	936.0
157.5°	952.5	952.5	951.8	956.3	950.3
160°	966.1	965.3	964.6	969.1	963.8
162.5°	978.9	976.6	975.9	981.1	976.6
165°	988.6	986.4	985.6	991.6	986.4
167.5°	996.9	993.9	993.9	999.9	993.9
170°	1003.7	1000.7	1000.7	1006.7	1000.7
172.5°	1008.2	1004.4	1005.2	1011.2	1004.4
175°	1011.9	1008.2	1008.9	1014.2	1008.2
177.5°	1013.4	1009.7	1010.4	1016.4	1008.9
180°	1011.9	1011.9	1011.9	1011.9	1011.9

(END OF REPORT)