

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: P1031881

Luminaire Tested: S123DIW-B775D1320UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031881
REPORT IS A COMBINATION OF REPORTS P991947 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B775D1320UB35-4F0-XX-W2A-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

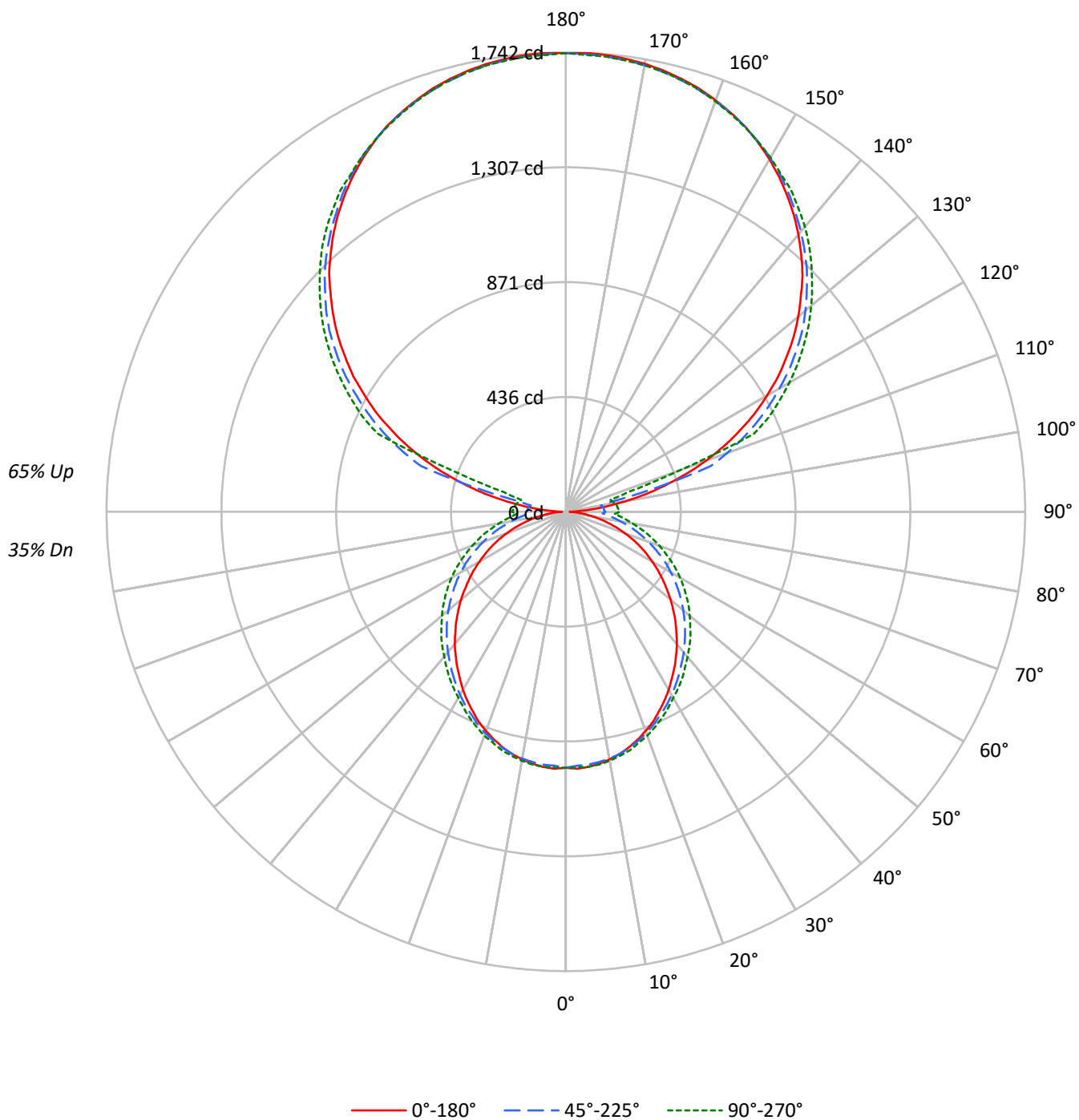
Lumens per Lamp: N/A
Luminaire Lumens: 8566.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 78
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: P1031881

CATALOG NUMBER: S123DIW-B775D1320UB35-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1031881

CATALOG NUMBER: S123DIW-B775D1320UB35-4F0-XX-W2A-D

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	104	104	104	104	94	94	94	94	75	75	75		58	58	58		42
1	94	89	85	81	84	81	77	74	64	62	60		50	48	47		36
2	85	77	71	66	76	70	65	60	56	52	49		43	41	38		31
3	77	68	60	54	69	61	55	50	49	45	41		38	35	32		28
4	71	60	52	46	63	54	47	42	43	38	34		34	30	27		24
5	65	53	45	39	58	48	41	36	39	34	29		30	26	23		22
6	59	47	39	33	53	43	36	31	35	29	26		27	23	20		20
7	55	43	35	29	49	39	32	27	31	26	22		25	21	18		18
8	51	39	31	26	46	35	28	24	29	23	20		22	19	16		17
9	47	35	28	23	42	32	25	21	26	21	18		21	17	14		15
10	44	32	25	20	40	29	23	19	24	19	16		19	15	13		14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10444	10444	10444
5°	10473	10138	10130
10°	10375	9863	9788
15°	10238	9560	9426
20°	10043	9222	9036
25°	9803	8842	8633
30°	9558	8496	8228
35°	9281	8135	7899
40°	9019	7805	7550
45°	8728	7485	7263
50°	8440	7167	6951
55°	8121	6842	6666
60°	7808	6510	6371
65°	7487	6155	6028
70°	7003	5758	5674
75°	6394	5305	5309
80°	5679	4846	4891
85°	4976	4475	4593

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8728 cd/sqm

TEST NUMBER: P1031881

CATALOG NUMBER: S123DIW-B775D1320UB35-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	1.1
10°-20°	262.4	3.1
20°-30°	392.4	4.6
30°-40°	468.5	5.5
40°-50°	490.2	5.7
50°-60°	460.0	5.4
60°-70°	384.2	4.5
70°-80°	274.7	3.2
80°-90°	167.0	1.9
90°-100°	164.0	1.9
100°-110°	372.0	4.3
110°-120°	777.0	9.1
120°-130°	951.1	11.1
130°-140°	998.2	11.7
140°-150°	924.1	10.8
150°-160°	743.2	8.7
160°-170°	479.6	5.6
170°-180°	165.3	1.9
0°-30°	746.8	8.7
0°-40°	1215.3	14.2
0°-60°	2165.5	25.3
0°-90°	2991.4	34.9
90°-120°	1313.0	15.3
90°-150°	4186.5	48.9
90°-180°	5575.0	65.1
0°-180°	8566.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	971	969	963	971	970	92
15°	925	928	927	938	936	261
25°	835	846	849	862	862	385
35°	719	736	749	765	770	449
45°	588	613	640	660	668	453
55°	448	483	521	550	558	401
65°	310	351	397	429	440	306
75°	168	218	271	306	318	180
85°	52	105	161	197	207	53
90°	15	80	150	192	205	14
95°	90	79	145	186	197	103
105°	394	433	362	163	175	417
115°	728	748	798	836	850	719
125°	1021	1032	1067	1092	1102	913
135°	1270	1276	1293	1316	1317	977
145°	1464	1472	1474	1485	1489	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

TEST NUMBER: P1031881

CATALOG NUMBER: S123DIW-B775D1320UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	970.3	970.3	970.3	970.3	970.3
2.5°	975.6	972.4	964.0	972.4	971.4
5°	971.4	969.3	962.9	971.4	970.3
7.5°	964.0	964.0	957.6	968.2	967.1
10°	953.4	955.5	950.2	960.8	958.7
12.5°	940.7	943.9	940.7	950.2	948.1
15°	924.9	928.0	927.0	937.5	936.5
17.5°	905.8	912.2	911.1	920.6	918.5
20°	884.7	891.0	893.1	902.7	903.7
22.5°	862.5	868.8	872.0	884.7	883.6
25°	835.0	845.6	848.8	862.5	862.5
27.5°	808.6	820.2	826.6	838.2	839.2
30°	780.1	793.8	802.2	814.9	814.9
32.5°	748.3	764.2	775.8	789.6	792.7
35°	718.7	735.7	749.4	765.3	769.5
37.5°	687.0	706.1	721.9	739.9	743.1
40°	655.3	674.4	695.5	713.5	717.7
42.5°	620.4	644.8	667.0	687.0	693.4
45°	587.7	613.0	639.5	659.6	668.0
47.5°	552.8	581.3	610.9	633.1	639.5
50°	519.0	548.6	581.3	605.7	613.0
52.5°	483.0	514.8	551.7	577.1	586.6
55°	448.2	483.0	521.1	549.6	558.1
57.5°	414.3	450.3	491.5	520.0	529.5
60°	378.4	416.5	459.8	489.4	501.0
62.5°	344.6	383.7	430.2	459.8	470.4
65°	309.7	350.9	397.4	429.1	439.7
67.5°	274.8	318.2	364.7	399.5	408.0
70°	237.8	283.3	334.0	367.8	378.4
72.5°	204.0	249.4	302.3	337.2	347.7
75°	168.1	217.7	270.6	305.5	318.2
77.5°	137.4	187.1	239.9	276.9	286.4
80°	104.6	156.4	211.4	247.3	257.9
82.5°	76.1	129.0	185.0	220.9	231.5
85°	51.8	104.6	160.7	196.6	207.2
87.5°	31.7	84.6	138.5	174.4	185.0
90°	15.0	79.7	150.4	191.6	204.7
92.5°	42.4	80.1	144.6	188.5	199.3
95°	90.4	78.6	144.7	186.5	197.1
97.5°	154.0	155.8	139.6	181.7	193.6
100°	227.8	287.5	134.6	175.6	187.5
102.5°	312.1	358.5	181.2	168.2	181.4
105°	393.5	433.0	362.2	163.2	175.2
107.5°	479.0	512.8	575.5	405.1	245.4
110°	564.4	593.9	650.3	635.1	458.9

TEST NUMBER: P1031881

CATALOG NUMBER: S123DIW-B775D1320UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	647.1	671.0	725.4	763.4	770.3
115°	727.5	748.0	797.6	835.9	849.5
117.5°	807.6	825.1	867.5	903.2	913.0
120°	880.2	897.1	935.9	970.5	977.9
122.5°	955.1	966.2	1004.2	1034.0	1042.7
125°	1021.3	1031.6	1067.4	1092.2	1102.2
127.5°	1088.5	1097.7	1130.6	1155.6	1160.5
130°	1150.5	1159.7	1186.1	1211.3	1215.1
132.5°	1208.8	1219.2	1238.9	1263.1	1266.6
135°	1269.5	1276.3	1293.1	1315.9	1317.4
137.5°	1321.2	1330.6	1340.5	1363.9	1366.6
140°	1371.9	1379.6	1386.6	1407.7	1410.4
142.5°	1419.7	1426.4	1430.2	1447.8	1449.2
145°	1463.6	1471.6	1474.2	1485.2	1489.4
147.5°	1505.2	1511.6	1514.2	1520.0	1517.7
150°	1543.9	1547.8	1550.4	1553.0	1551.2
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)