

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: P1033367

Luminaire Tested: S124DIW-B1195D770UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033367
REPORT IS A COMBINATION OF REPORTS P997255 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

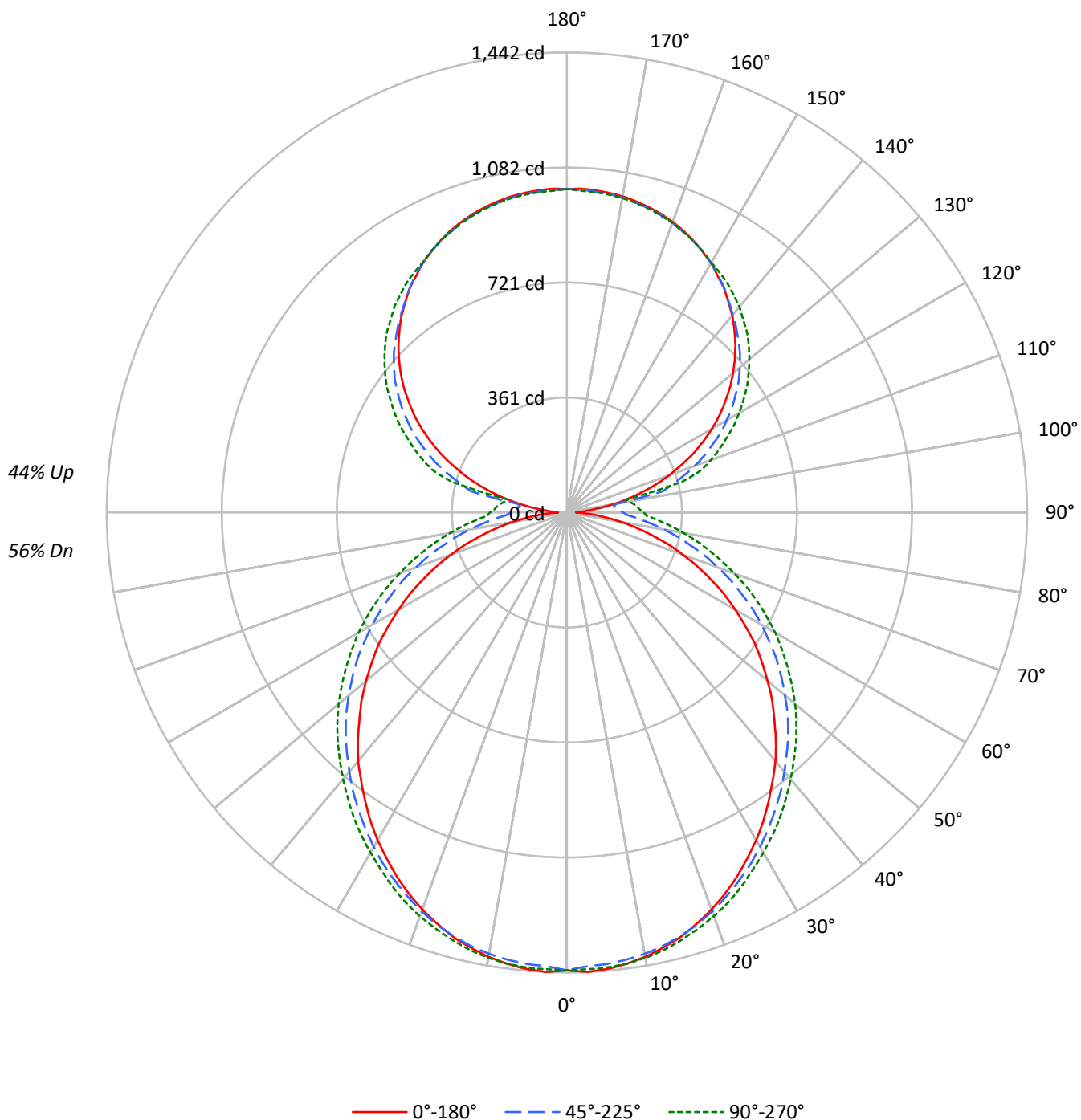
Lumens per Lamp: N/A
Luminaire Lumens: 8032.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1033367

CATALOG NUMBER: S124DIW-B1195D770UB35-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1033367

CATALOG NUMBER: S124DIW-B1195D770UB35-4F0-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	30	10
RCR																	
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	98	93	89	85	91	87	83	79	75	72	69	63	61	59	53	51	50
2	89	81	74	68	82	75	69	64	65	60	56	55	52	49	46	43	41
3	81	71	63	56	75	66	59	53	57	51	47	48	44	41	40	37	35
4	74	62	54	47	68	58	51	45	50	44	39	43	38	34	36	32	29
5	68	55	47	40	62	52	44	38	45	39	34	38	33	30	32	28	25
6	62	49	41	35	57	46	39	33	40	34	29	34	30	26	29	25	22
7	57	45	36	31	53	42	34	29	36	30	26	31	26	23	26	23	20
8	53	40	32	27	49	38	31	26	33	27	23	29	24	20	24	20	18
9	50	37	29	24	46	35	28	23	30	24	20	26	21	18	22	19	16
10	46	34	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11702	11702	11702
5°	11735	11398	11418
10°	11659	11173	11142
15°	11550	10922	10829
20°	11388	10649	10526
25°	11206	10347	10199
30°	11008	10049	9865
35°	10786	9744	9569
40°	10607	9452	9261
45°	10343	9176	8989
50°	10116	8864	8702
55°	9883	8564	8372
60°	9521	8190	8061
65°	9124	7787	7687
70°	8641	7325	7256
75°	7965	6812	6843
80°	7206	6291	6412
85°	6200	5766	6064

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10343 cd/sqm

TEST NUMBER: P1033367

CATALOG NUMBER: S124DIW-B1195D770UB35-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	1.7
10°-20°	389.6	4.9
20°-30°	589.1	7.3
30°-40°	712.7	8.9
40°-50°	753.4	9.4
50°-60°	709.1	8.8
60°-70°	588.4	7.3
70°-80°	412.9	5.1
80°-90°	234.9	2.9
90°-100°	172.3	2.1
100°-110°	324.2	4.0
110°-120°	492.0	6.1
120°-130°	576.0	7.2
130°-140°	591.5	7.4
140°-150°	540.7	6.7
150°-160°	433.4	5.4
160°-170°	279.5	3.5
170°-180°	96.3	1.2
0°-30°	1114.7	13.9
0°-40°	1827.4	22.8
0°-60°	3289.9	41.0
0°-90°	4526.1	56.4
90°-120°	988.5	12.3
90°-150°	2696.7	33.6
90°-180°	3506.0	43.7
0°-180°	8032.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1435	1435	1435	1435	1435	
5°	1437	1432	1421	1434	1432	136
15°	1377	1379	1374	1388	1387	388
25°	1260	1270	1274	1292	1294	580
35°	1102	1122	1138	1160	1165	690
45°	919	950	980	1008	1016	710
55°	720	754	802	834	844	642
65°	498	550	604	644	657	494
75°	276	336	403	448	463	294
85°	85	153	225	273	289	89
90°	28	101	176	227	241	20
95°	63	90	156	204	220	68
105°	243	279	343	390	375	255
115°	436	452	503	540	551	430
125°	605	607	646	678	689	541
135°	746	746	760	787	798	576
145°	858	859	859	869	877	537
155°	939	940	938	941	939	433
165°	991	987	987	993	986	280
175°	1014	1009	1010	1017	1008	97
180°	1014	1014	1014	1014	1014	

TEST NUMBER: P1033367

CATALOG NUMBER: S124DIW-B1195D770UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1435.1	1435.1	1435.1	1435.1	1435.1
2.5°	1441.6	1436.8	1423.9	1435.1	1433.5
5°	1436.8	1431.9	1420.7	1433.5	1431.9
7.5°	1427.1	1423.9	1414.3	1428.7	1427.1
10°	1414.3	1412.6	1404.6	1419.1	1417.5
12.5°	1396.6	1396.6	1391.8	1404.6	1404.6
15°	1377.3	1378.9	1374.1	1388.5	1386.9
17.5°	1351.6	1356.4	1354.8	1369.3	1367.6
20°	1324.3	1329.1	1330.7	1346.8	1346.8
22.5°	1293.7	1300.1	1303.4	1319.4	1322.6
25°	1260.0	1269.6	1274.4	1292.1	1293.7
27.5°	1223.0	1237.5	1243.9	1260.0	1261.6
30°	1186.0	1198.9	1210.2	1227.8	1231.0
32.5°	1145.9	1161.9	1174.8	1195.7	1198.9
35°	1102.5	1121.8	1137.8	1160.3	1165.2
37.5°	1059.1	1081.6	1100.9	1123.4	1128.2
40°	1017.3	1038.2	1060.7	1084.8	1091.2
42.5°	969.1	993.2	1020.5	1047.8	1052.7
45°	919.3	949.8	980.3	1007.7	1015.7
47.5°	872.7	903.2	938.5	965.9	975.5
50°	821.2	856.6	891.9	924.1	933.7
52.5°	769.8	805.2	846.9	879.1	888.7
55°	720.0	753.7	801.9	834.1	843.7
57.5°	663.7	705.5	752.1	790.7	798.7
60°	609.1	650.9	703.9	740.9	753.7
62.5°	556.1	602.7	655.7	692.7	705.5
65°	498.2	549.6	604.3	644.4	657.3
67.5°	443.6	498.2	556.1	596.2	609.1
70°	387.3	442.0	503.0	546.4	557.7
72.5°	332.7	388.9	454.8	496.6	509.5
75°	276.4	335.9	403.4	448.4	462.8
77.5°	223.4	286.1	356.8	401.8	417.8
80°	175.2	239.5	310.2	358.4	371.2
82.5°	127.0	194.5	265.2	315.0	329.5
85°	85.2	152.7	225.0	273.2	289.3
87.5°	53.0	118.9	189.6	236.2	250.7
90°	28.0	100.6	175.8	226.9	241.3
92.5°	35.5	90.3	165.4	215.0	227.8
95°	62.6	89.8	156.5	204.4	219.7
97.5°	98.9	162.2	148.5	194.1	209.2
100°	142.0	197.5	155.5	186.0	198.0
102.5°	192.1	236.5	306.7	177.9	190.7
105°	242.7	279.4	342.7	389.6	375.2
107.5°	292.0	321.6	383.1	427.1	441.4
110°	340.5	365.2	426.0	464.5	479.6



TEST NUMBER: P1033367

CATALOG NUMBER: S124DIW-B1195D770UB35-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.3	411.1	465.7	500.3	516.2
115°	435.7	452.5	503.1	540.1	551.3
117.5°	480.5	493.2	543.7	576.6	589.5
120°	524.4	532.3	578.1	611.7	623.1
122.5°	566.8	568.3	613.2	646.2	655.9
125°	605.4	606.8	645.5	678.3	688.8
127.5°	644.1	643.2	679.2	707.4	717.8
130°	679.6	678.8	706.8	736.5	746.1
132.5°	713.7	713.7	736.0	764.1	773.0
135°	746.3	745.5	759.8	787.1	798.2
137.5°	776.6	775.0	785.2	810.8	818.1
140°	806.2	806.1	809.2	832.4	841.1
142.5°	831.1	834.1	833.3	852.5	858.9
145°	858.4	859.1	859.1	869.4	877.4
147.5°	879.6	882.6	881.8	884.2	891.3
150°	903.1	904.6	903.8	903.8	904.6
152.5°	921.2	923.5	922.0	923.5	922.8
155°	939.4	940.2	937.9	941.0	938.7
157.5°	955.4	955.4	952.3	956.1	952.3
160°	969.0	966.7	966.0	970.5	966.0
162.5°	981.1	978.1	977.4	981.9	976.6
165°	991.0	987.2	987.2	993.3	986.5
167.5°	999.3	995.6	994.8	1001.6	994.0
170°	1006.2	1001.6	1002.4	1008.4	1000.9
172.5°	1010.7	1006.2	1006.9	1013.0	1004.7
175°	1013.8	1009.2	1010.0	1016.8	1007.7
177.5°	1016.0	1010.7	1012.2	1018.3	1009.2
180°	1013.8	1013.8	1013.8	1013.8	1013.8

(END OF REPORT)