

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: P1034305

Luminaire Tested: S124RDIW-B795D770UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034305
REPORT IS A COMBINATION OF REPORTS P1000905 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B795D770UB35-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

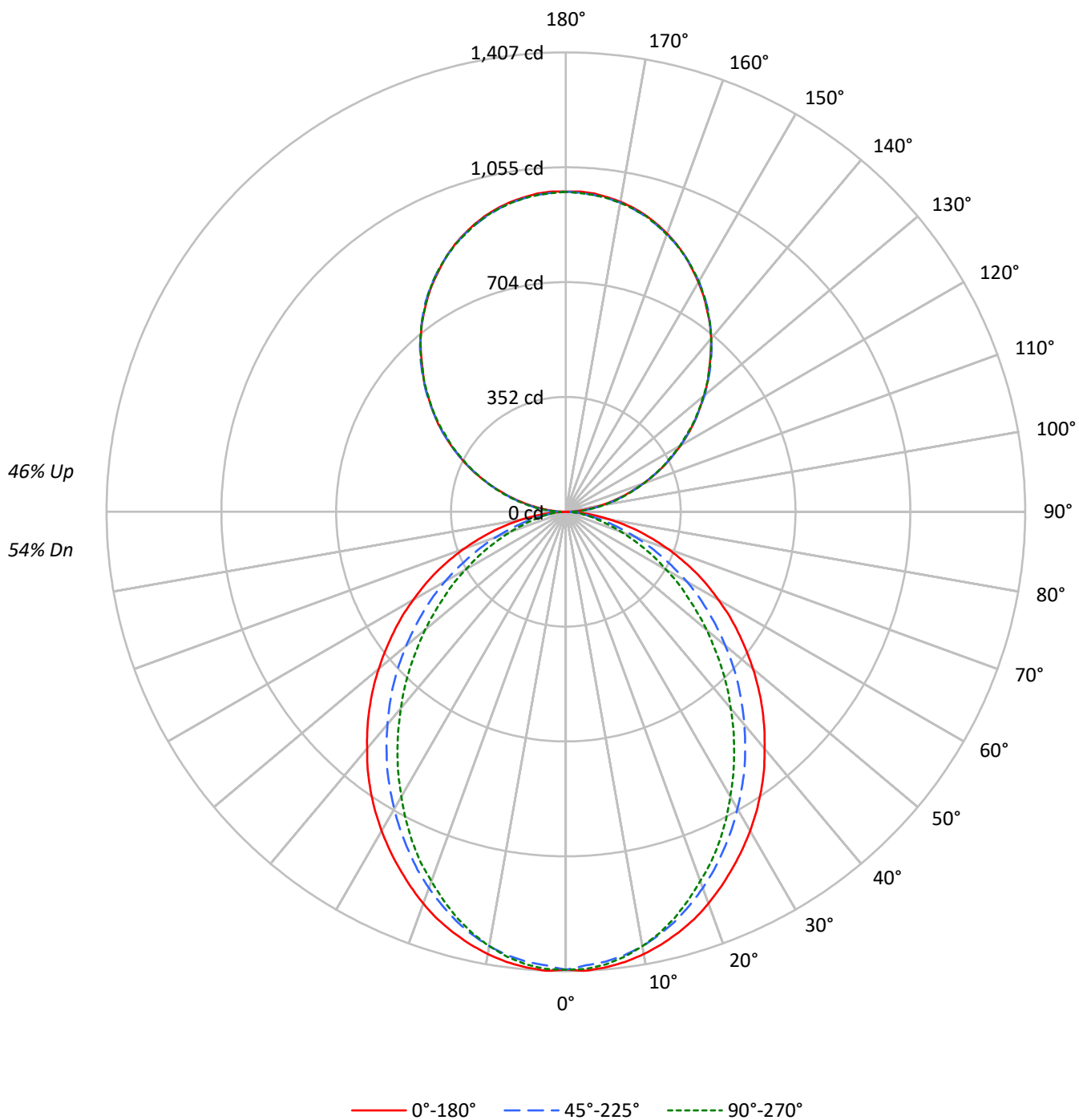
Lumens per Lamp: N/A
Luminaire Lumens: 5962.9 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 59.1
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: P1034305

CATALOG NUMBER: S124RDIW-B795D770UB35-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1034305

CATALOG NUMBER: S124RDIW-B795D770UB35-4F0-XX-W2A-F1

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	95	91	88	92	88	85	82	76	73	71	64	63	61	54	52	51
2	90	83	77	72	84	77	72	68	67	63	59	57	54	51	48	46	44
3	83	73	66	60	76	68	62	57	59	54	50	50	47	44	42	40	38
4	76	65	57	51	70	61	54	48	53	47	43	45	41	38	38	35	33
5	70	58	50	44	64	54	47	42	47	42	37	41	36	33	34	31	29
6	64	52	44	38	60	49	42	37	43	37	33	37	32	29	31	28	25
7	60	47	39	34	55	44	37	32	39	33	29	34	29	26	29	25	23
8	55	43	35	30	51	40	33	29	35	30	26	31	26	23	26	23	20
9	52	39	32	27	48	37	30	26	33	27	23	28	24	21	24	21	18
10	48	36	29	24	45	34	27	23	30	25	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11438	11438	11438
5°	11439	11098	11099
10°	11342	10748	10620
15°	11186	10312	10055
20°	10982	9815	9410
25°	10727	9279	8781
30°	10478	8732	8073
35°	10203	8177	7382
40°	9877	7579	6672
45°	9570	6987	5970
50°	9222	6341	5256
55°	8846	5677	4519
60°	8429	4974	3790
65°	8025	4166	3090
70°	7451	3316	2361
75°	6717	2412	1652
80°	5610	1481	1187
85°	4221	853	652

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 9570 cd/sqm

TEST NUMBER: P1034305

CATALOG NUMBER: S124RDIW-B795D770UB35-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	2.2
10°-20°	367.8	6.2
20°-30°	530.9	8.9
30°-40°	601.7	10.1
40°-50°	581.0	9.7
50°-60°	483.0	8.1
60°-70°	333.4	5.6
70°-80°	168.5	2.8
80°-90°	44.9	0.8
90°-100°	63.9	1.1
100°-110°	191.4	3.2
110°-120°	325.1	5.5
120°-130°	428.8	7.2
130°-140°	481.6	8.1
140°-150°	473.3	7.9
150°-160°	398.1	6.7
160°-170°	264.9	4.4
170°-180°	92.8	1.6
0°-30°	1030.6	17.3
0°-40°	1632.3	27.4
0°-60°	2696.4	45.2
0°-90°	3243.1	54.4
90°-120°	580.4	9.7
90°-150°	1964.1	32.9
90°-180°	2720.0	45.6
0°-180°	5962.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1403	1403	1403	1403	1403	
5°	1400	1396	1383	1394	1392	133
15°	1334	1324	1297	1295	1288	376
25°	1206	1187	1143	1124	1114	556
35°	1043	1008	955	918	899	652
45°	851	811	746	694	674	656
55°	644	601	532	476	455	576
65°	438	392	323	277	264	433
75°	233	193	143	118	112	246
85°	58	36	33	31	31	64
90°	2	11	17	21	23	7
95°	46	52	58	60	60	49
105°	177	177	180	183	185	187
115°	330	330	329	328	328	326
125°	481	481	481	479	478	429
135°	621	626	626	624	622	480
145°	754	757	758	757	755	472
155°	864	864	864	867	864	398
165°	941	939	937	942	939	265
175°	979	975	974	980	974	93
180°	980	980	980	980	980	

TEST NUMBER: P1034305

CATALOG NUMBER: S124RDIW-B795D770UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1402.7	1402.7	1402.7	1402.7	1402.7
2.5°	1407.0	1402.7	1390.8	1402.7	1401.6
5°	1400.5	1396.2	1383.3	1394.1	1391.9
7.5°	1390.8	1386.6	1370.4	1378.0	1374.7
10°	1375.8	1370.4	1351.1	1355.4	1351.1
12.5°	1356.5	1350.0	1326.4	1328.6	1322.1
15°	1333.9	1324.3	1297.4	1295.3	1287.7
17.5°	1308.1	1294.2	1263.0	1257.7	1246.9
20°	1277.0	1263.0	1226.5	1217.9	1204.0
22.5°	1242.6	1226.5	1186.8	1172.8	1162.1
25°	1206.1	1186.8	1142.8	1124.5	1113.8
27.5°	1168.5	1144.9	1098.7	1077.2	1062.2
30°	1128.8	1101.9	1051.5	1024.6	1007.4
32.5°	1086.9	1055.8	1003.1	970.9	954.8
35°	1042.9	1008.5	954.8	918.3	898.9
37.5°	996.7	961.2	902.2	862.4	843.1
40°	947.3	911.8	850.6	805.5	786.2
42.5°	900.0	862.4	798.0	751.8	731.4
45°	850.6	810.9	746.4	693.8	674.5
47.5°	800.1	759.3	692.7	638.0	616.5
50°	748.6	706.7	638.0	584.3	563.9
52.5°	696.0	655.1	584.3	529.5	508.0
55°	644.4	601.4	531.6	475.8	455.4
57.5°	593.9	548.8	480.1	423.2	408.1
60°	539.2	496.2	427.5	371.6	354.4
62.5°	489.8	444.6	373.8	323.3	310.4
65°	438.2	392.0	323.3	277.1	264.2
67.5°	384.5	340.5	276.0	235.2	220.2
70°	334.0	288.9	227.7	192.2	181.5
72.5°	280.3	240.6	183.7	154.7	145.0
75°	233.1	193.3	142.8	118.1	111.7
77.5°	183.7	149.3	106.3	89.1	87.0
80°	136.4	105.3	73.0	69.8	68.7
82.5°	95.6	67.7	52.6	50.5	49.4
85°	58.0	36.5	33.3	31.1	31.1
87.5°	24.7	16.1	15.0	14.0	15.0
90°	2.3	10.6	16.7	21.2	22.7
92.5°	19.7	29.6	33.4	35.6	36.4
95°	45.5	52.3	57.6	59.9	59.9
97.5°	72.8	78.8	84.9	87.9	87.9
100°	106.1	109.2	116.0	117.5	117.5
102.5°	141.0	141.8	147.8	150.1	150.9
105°	176.6	177.4	180.4	182.7	185.0
107.5°	213.8	214.6	215.3	218.3	217.6
110°	251.7	253.2	252.5	250.9	253.2



TEST NUMBER: P1034305

CATALOG NUMBER: S124RDIW-B795D770UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.1	291.1	289.6	289.6	289.6
115°	330.5	330.5	329.0	328.3	327.5
117.5°	367.7	367.7	366.9	364.7	362.4
120°	404.8	407.9	405.6	401.8	403.3
122.5°	443.5	444.3	443.5	441.2	437.4
125°	481.4	481.4	480.7	479.1	477.6
127.5°	515.5	517.8	516.3	514.8	514.0
130°	551.9	554.2	554.2	552.7	549.7
132.5°	589.1	590.6	589.8	588.3	587.6
135°	620.9	625.5	625.5	623.9	621.7
137.5°	656.5	658.8	660.3	658.1	658.8
140°	692.2	693.7	693.7	692.9	692.2
142.5°	724.8	726.3	725.5	725.5	725.5
145°	754.3	757.4	758.1	757.4	755.1
147.5°	784.7	788.5	787.7	786.9	786.2
150°	812.0	815.0	815.0	815.0	814.2
152.5°	837.7	839.3	840.0	842.3	840.0
155°	864.3	864.3	863.5	866.6	863.5
157.5°	887.0	885.5	885.5	887.8	885.5
160°	906.7	906.0	905.2	907.5	903.7
162.5°	924.9	922.7	921.9	926.4	922.7
165°	940.9	938.6	937.1	941.6	938.6
167.5°	953.7	950.7	950.7	955.3	950.7
170°	964.4	960.6	961.3	965.9	960.6
172.5°	971.9	968.9	968.9	974.2	968.9
175°	978.8	975.0	974.2	979.5	974.2
177.5°	981.8	978.0	978.0	983.3	977.2
180°	980.3	980.3	980.3	980.3	980.3

(END OF REPORT)