

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: P1001114

Luminaire Tested: S124RDR-B795DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001114
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-B795DB35-4F0-XX-W2A-F
Description: Define 4 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

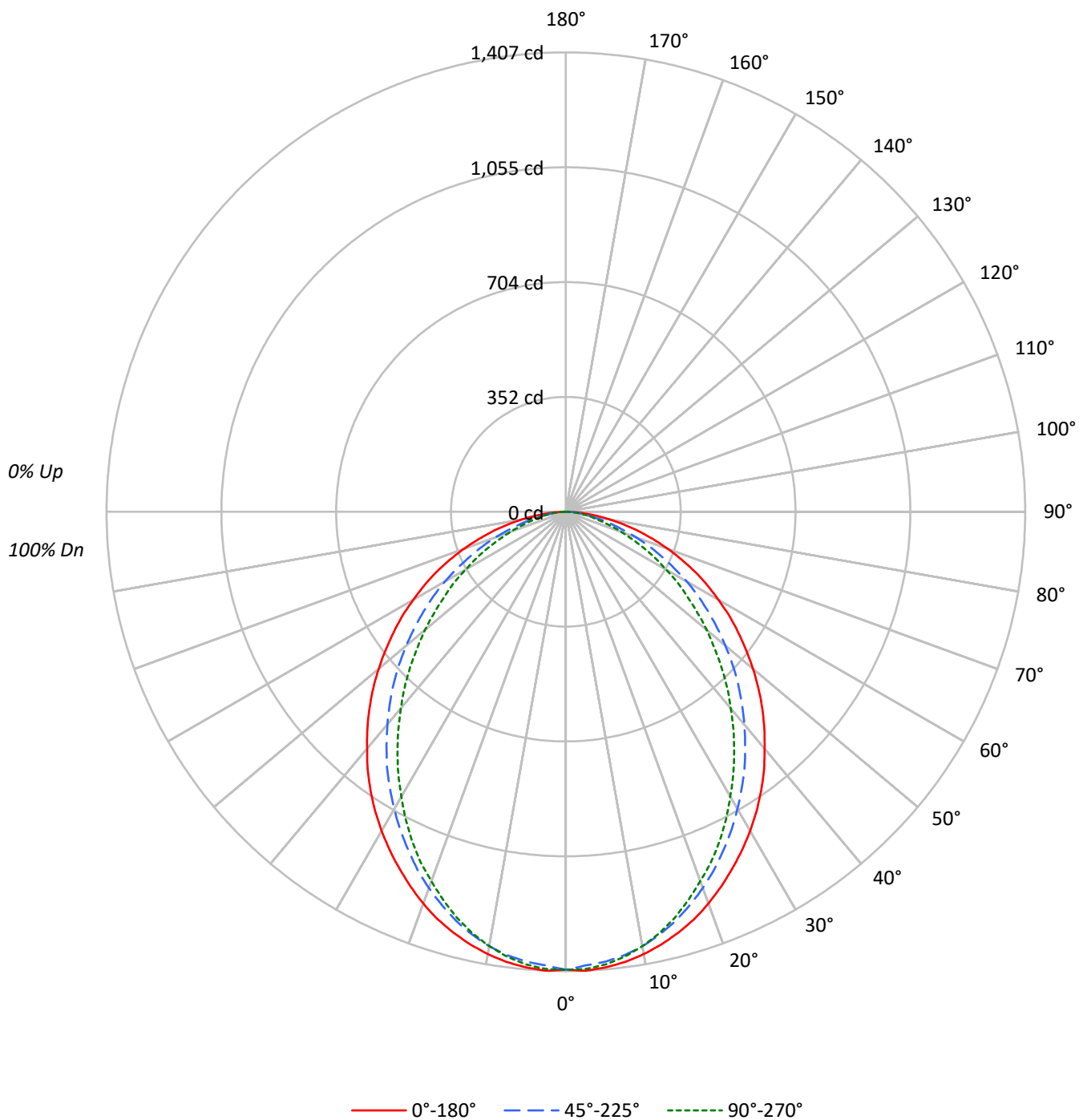
Lumens per Lamp: N/A
Luminaire Lumens: 3241.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35.9
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: P1001114

CATALOG NUMBER: S124RDR-B795DB35-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1001114

CATALOG NUMBER: S124RDR-B795DB35-4F0-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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72
4	84	73	65	58	82	72	64	58	69	62	57		67	61	56		65
5	78	66	57	51	76	65	56	50	62	55	50		61	54	49		59
6	72	59	51	45	70	58	50	44	57	49	44		55	49	44		53
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	35	29	54	42	34	29	41	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11438	11438	11438
5°	11464	11323	11394
10°	11392	11187	11187
15°	11261	10953	10871
20°	11082	10643	10448
25°	10852	10282	10021
30°	10629	9901	9486
35°	10382	9505	8948
40°	10084	9055	8369
45°	9809	8608	7778
50°	9497	8094	7154
55°	9161	7558	6474
60°	8794	6972	5780
65°	8455	6238	5098
70°	7963	5429	4327
75°	7344	4499	3519
80°	6405	3428	3226
85°	5427	3116	2910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9809 cd/sqm

TEST NUMBER: P1001114

CATALOG NUMBER: S124RDR-B795DB35-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	4.1
10°-20°	367.8	11.3
20°-30°	530.9	16.4
30°-40°	601.7	18.6
40°-50°	581.0	17.9
50°-60°	483.0	14.9
60°-70°	333.4	10.3
70°-80°	168.5	5.2
80°-90°	42.8	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1030.6	31.8
0°-40°	1632.3	50.4
0°-60°	2696.4	83.2
0°-90°	3241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3241.0	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	67
90°	0	0	0	0	0	

TEST NUMBER: P1001114

CATALOG NUMBER: S124RDR-B795DB35-4F0-XX-W2A-F

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°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)