

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: P998562

Luminaire Tested: S124DR-B795DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998562
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B795DB35-4F0-XX-W2A-F
Description: Define 4 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

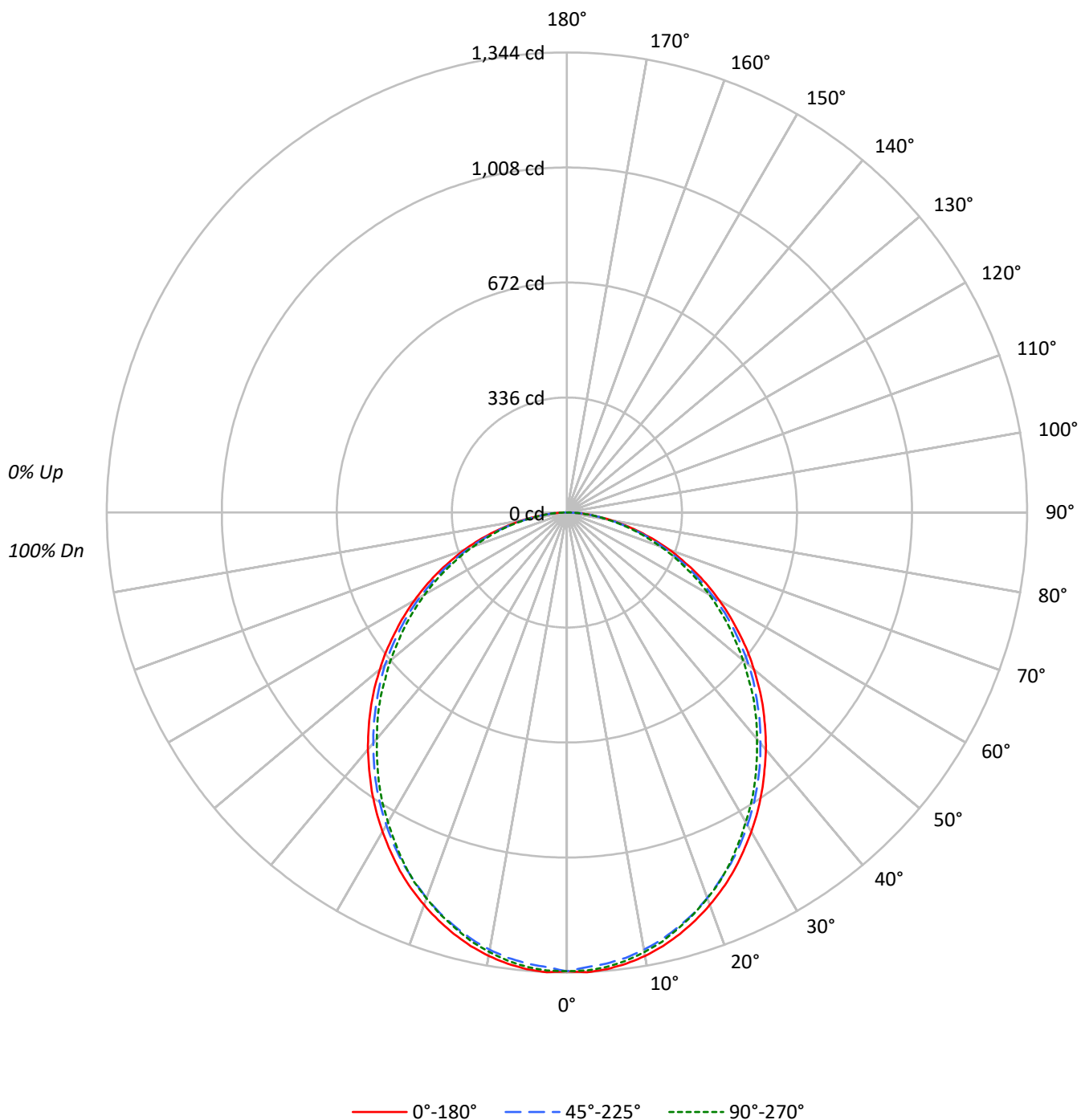
Lumens per Lamp: N/A
Luminaire Lumens: 3440.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	52	43	37	50	43	37		49	42	37		47
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10929	10929	10929
5°	10962	10830	10909
10°	10893	10742	10795
15°	10761	10589	10617
20°	10587	10400	10410
25°	10388	10184	10155
30°	10142	9930	9839
35°	9889	9664	9536
40°	9625	9362	9191
45°	9350	9065	8892
50°	9046	8800	8529
55°	8718	8458	8183
60°	8389	8075	7828
65°	8019	7708	7398
70°	7606	7219	6938
75°	6969	6632	6462
80°	6203	5950	5800
85°	5427	5221	5127

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9350 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.3	3.7
10°-20°	355.9	10.3
20°-30°	523.8	15.2
30°-40°	608.9	17.7
40°-50°	608.8	17.7
50°-60°	532.5	15.5
60°-70°	395.3	11.5
70°-80°	224.3	6.5
80°-90°	64.2	1.9
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°	1006.0	29.2
0°-40°	1614.9	46.9
0°-60°	2756.1	80.1
0°-90°	3440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1339	1335	1323	1335	1333	127
15°	1275	1270	1254	1261	1258	359
25°	1154	1147	1132	1133	1129	531
35°	993	986	971	963	958	621
45°	811	803	786	774	771	625
55°	613	610	595	582	576	549
65°	416	410	400	389	383	411
75°	221	216	210	206	205	235
85°	58	58	56	56	55	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.2	1340.2	1340.2	1340.2	1340.2
2.5°	1344.5	1341.3	1329.5	1340.2	1339.2
5°	1339.2	1334.9	1323.1	1334.9	1332.7
7.5°	1329.5	1325.2	1312.3	1322.0	1320.9
10°	1315.5	1311.2	1297.3	1305.9	1303.7
12.5°	1297.3	1293.0	1278.0	1287.6	1284.4
15°	1274.7	1270.4	1254.3	1260.8	1257.6
17.5°	1249.0	1243.6	1228.6	1232.9	1230.7
20°	1220.0	1214.6	1198.5	1201.7	1199.6
22.5°	1188.8	1181.3	1165.2	1171.6	1167.3
25°	1154.5	1146.9	1131.9	1133.0	1128.7
27.5°	1115.8	1108.3	1094.3	1092.2	1086.8
30°	1077.1	1068.5	1054.6	1050.3	1044.9
32.5°	1036.3	1028.8	1013.8	1008.4	1003.0
35°	993.4	985.9	970.8	963.3	957.9
37.5°	948.3	941.8	925.7	918.2	910.7
40°	904.2	895.6	879.5	868.8	863.4
42.5°	857.0	852.7	834.4	821.5	818.3
45°	810.8	803.3	786.1	774.3	771.1
47.5°	762.5	757.1	741.0	728.1	719.5
50°	713.1	708.8	693.7	678.7	672.3
52.5°	664.8	659.4	643.3	630.4	621.8
55°	613.2	610.0	594.9	582.1	575.6
57.5°	564.9	561.7	546.6	533.7	527.3
60°	514.4	509.0	495.1	485.4	480.0
62.5°	465.0	460.7	445.7	437.1	431.7
65°	415.6	410.2	399.5	388.8	383.4
67.5°	365.1	360.8	350.1	339.4	338.3
70°	319.0	311.4	302.8	294.3	291.0
72.5°	269.6	262.0	255.6	249.1	245.9
75°	221.2	215.9	210.5	206.2	205.1
77.5°	174.0	171.8	166.5	165.4	162.2
80°	132.1	128.9	126.7	124.6	123.5
82.5°	91.3	90.2	90.2	89.1	88.1
85°	58.0	58.0	55.8	55.8	54.8
87.5°	27.9	26.8	25.8	25.8	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)