

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: P1037701

Luminaire Tested: S124DS-B795DB27-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1037701
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: S124DS-B795DB27-4F0-XX-W2A-F
Description: Define 4 Direct Surface with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

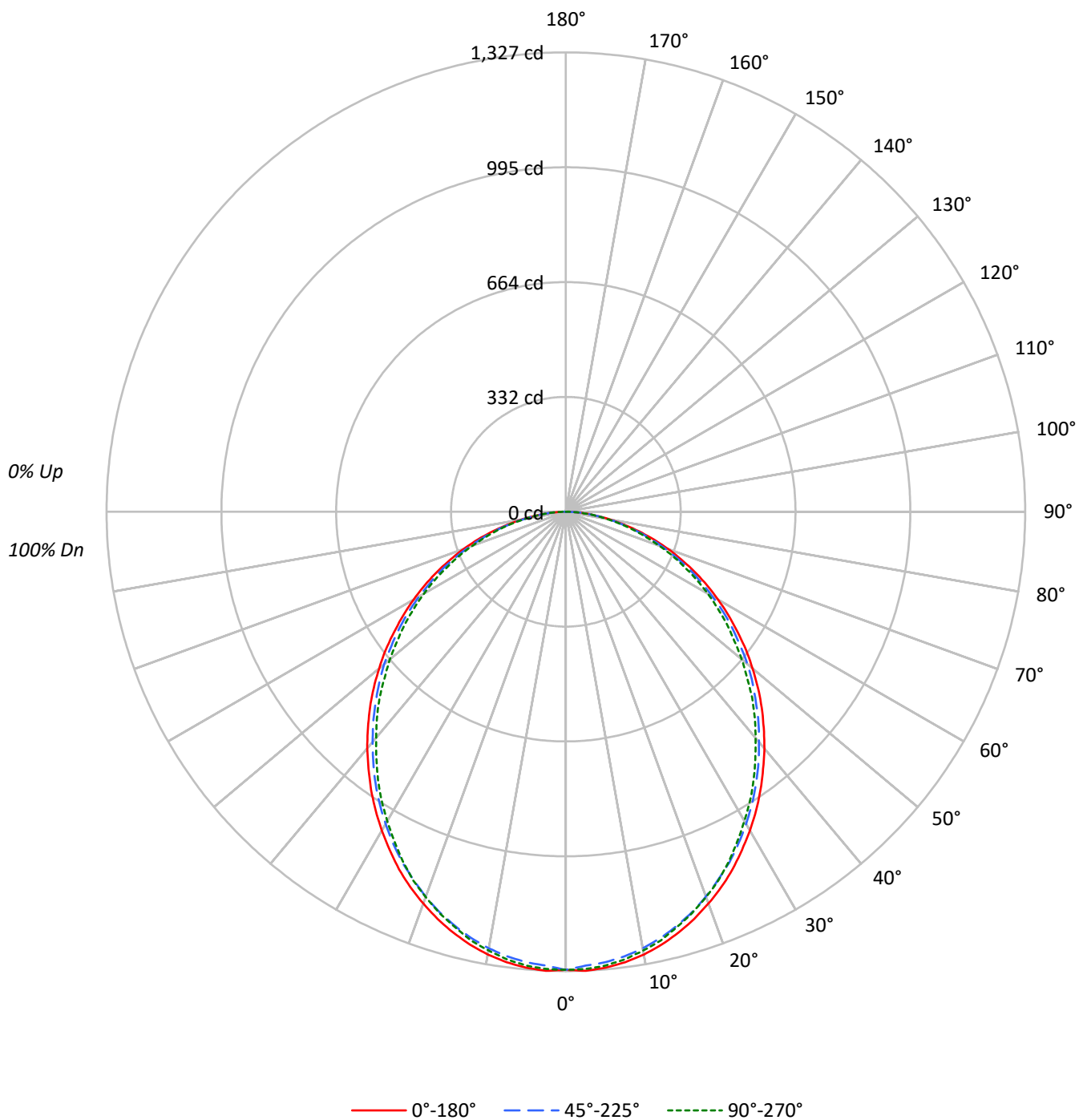
Lumens per Lamp: N/A
Luminaire Lumens: 3396.0 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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°	10789	10789	10789
5°	10821	10691	10770
10°	10754	10605	10658
15°	10624	10454	10481
20°	10452	10268	10276
25°	10254	10054	10025
30°	10013	9803	9714
35°	9763	9541	9414
40°	9503	9243	9074
45°	9230	8950	8778
50°	8931	8689	8420
55°	8607	8350	8079
60°	8282	7970	7729
65°	7917	7610	7303
70°	7508	7129	6850
75°	6881	6547	6380
80°	6124	5875	5724
85°	5352	5155	5062

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9230 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	3.7
10°-20°	351.3	10.3
20°-30°	517.1	15.2
30°-40°	601.1	17.7
40°-50°	601.0	17.7
50°-60°	525.7	15.5
60°-70°	390.3	11.5
70°-80°	221.4	6.5
80°-90°	63.4	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°	993.1	29.2
0°-40°	1594.2	46.9
0°-60°	2720.9	80.1
0°-90°	3396.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3396.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1322	1318	1306	1318	1316	125
15°	1258	1254	1238	1245	1242	355
25°	1140	1132	1117	1118	1114	524
35°	981	973	958	951	946	613
45°	800	793	776	764	761	617
55°	605	602	587	575	568	542
65°	410	405	394	384	378	406
75°	218	213	208	204	202	232
85°	57	57	55	55	54	65
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1323.1	1323.1	1323.1	1323.1	1323.1
2.5°	1327.3	1324.2	1312.5	1323.1	1322.0
5°	1322.0	1317.8	1306.1	1317.8	1315.7
7.5°	1312.5	1308.3	1295.5	1305.1	1304.0
10°	1298.7	1294.5	1280.7	1289.2	1287.1
12.5°	1280.7	1276.5	1261.6	1271.2	1268.0
15°	1258.4	1254.2	1238.3	1244.6	1241.5
17.5°	1233.0	1227.7	1212.8	1217.1	1215.0
20°	1204.4	1199.1	1183.2	1186.3	1184.2
22.5°	1173.6	1166.2	1150.3	1156.7	1152.4
25°	1139.7	1132.3	1117.4	1118.5	1114.2
27.5°	1101.5	1094.1	1080.3	1078.2	1072.9
30°	1063.4	1054.9	1041.1	1036.9	1031.6
32.5°	1023.1	1015.7	1000.8	995.5	990.2
35°	980.7	973.2	958.4	951.0	945.7
37.5°	936.1	929.8	913.9	906.5	899.0
40°	892.7	884.2	868.3	857.7	852.4
42.5°	846.0	841.8	823.8	811.0	807.9
45°	800.4	793.0	776.1	764.4	761.2
47.5°	752.7	747.4	731.5	718.8	710.3
50°	704.0	699.7	684.9	670.0	663.7
52.5°	656.3	650.9	635.0	622.3	613.8
55°	605.4	602.2	587.3	574.6	568.3
57.5°	557.7	554.5	539.6	526.9	520.5
60°	507.8	502.5	488.7	479.2	473.9
62.5°	459.1	454.8	440.0	431.5	426.2
65°	410.3	405.0	394.4	383.8	378.5
67.5°	360.5	356.2	345.6	335.0	334.0
70°	314.9	307.5	299.0	290.5	287.3
72.5°	266.1	258.7	252.3	246.0	242.8
75°	218.4	213.1	207.8	203.6	202.5
77.5°	171.7	169.6	164.3	163.3	160.1
80°	130.4	127.2	125.1	123.0	121.9
82.5°	90.1	89.1	89.1	88.0	86.9
85°	57.2	57.2	55.1	55.1	54.1
87.5°	27.6	26.5	25.4	25.4	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)