

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: P1004548

Luminaire Tested: S125DR-B1090DB50-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B1090DB50-4F0-XX-W2A-F
Description: Define 5 Direct Recessed with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

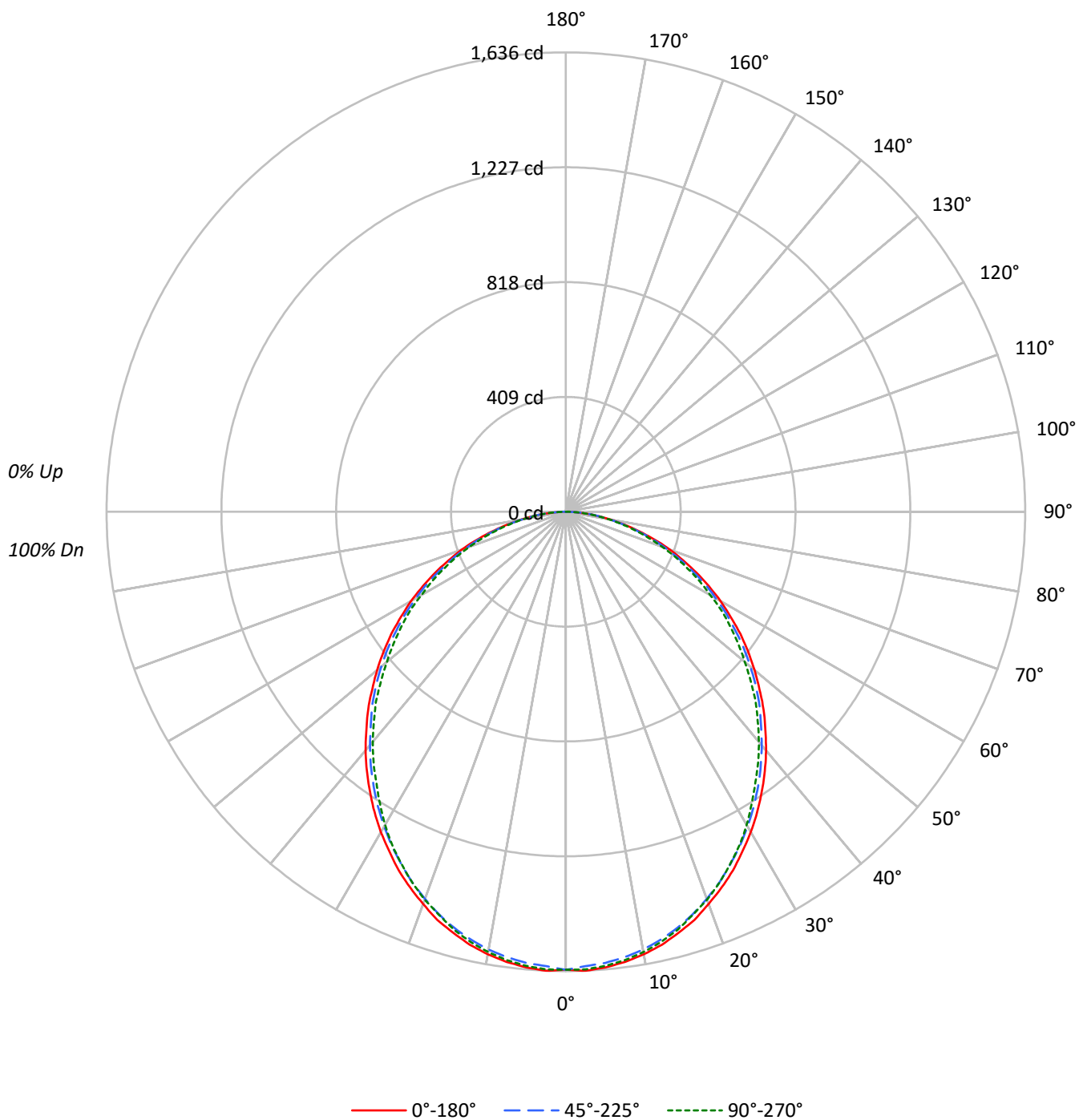
Lumens per Lamp: N/A
Luminaire Lumens: 4245.0 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: P1004548

CATALOG NUMBER: S125DR-B1090DB50-4F0-XX-W2A-F

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	94	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	62	56	81	70	62	55	67	60	55		65	59	54		63
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57
6	71	57	49	42	69	56	48	42	55	47	42		53	46	41		51
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		47
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		43
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		40
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10450	10450	10450
5°	10473	10373	10440
10°	10409	10300	10359
15°	10297	10177	10219
20°	10135	10003	10021
25°	9961	9797	9788
30°	9746	9575	9527
35°	9517	9335	9204
40°	9281	9076	8947
45°	9026	8839	8663
50°	8746	8553	8296
55°	8475	8230	7999
60°	8151	7904	7622
65°	7767	7512	7257
70°	7396	7059	6817
75°	6741	6516	6293
80°	5999	5904	5760
85°	5219	5315	5028

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9026 cd/sqm

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CATALOG NUMBER: S125DR-B1090DB50-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.9	3.6
10°-20°	434.7	10.2
20°-30°	641.8	15.1
30°-40°	748.8	17.6
40°-50°	752.0	17.7
50°-60°	660.2	15.6
60°-70°	491.7	11.6
70°-80°	280.8	6.6
80°-90°	81.1	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°	1230.4	29.0
0°-40°	1979.2	46.6
0°-60°	3391.4	79.9
0°-90°	4245.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1631	1631	1631	1631	1631	
5°	1628	1626	1613	1624	1623	155
15°	1552	1548	1534	1541	1541	438
25°	1409	1403	1386	1388	1384	648
35°	1217	1212	1194	1187	1177	761
45°	996	991	976	960	956	767
55°	759	755	737	725	716	677
65°	512	510	496	484	479	508
75°	272	270	263	259	254	290
85°	71	72	72	71	68	82
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1631.0	1631.0	1631.0	1631.0	1631.0
2.5°	1636.1	1632.3	1619.4	1632.3	1631.0
5°	1628.4	1625.8	1612.9	1624.5	1623.2
7.5°	1616.8	1614.2	1600.0	1611.6	1610.3
10°	1600.0	1597.4	1583.2	1593.5	1592.3
12.5°	1579.4	1574.2	1561.3	1569.0	1569.0
15°	1552.3	1548.4	1534.2	1540.6	1540.6
17.5°	1523.9	1517.4	1503.2	1511.0	1504.5
20°	1486.4	1483.9	1467.1	1476.1	1469.7
22.5°	1449.0	1443.9	1428.4	1433.5	1429.7
25°	1409.0	1402.6	1385.8	1388.4	1384.5
27.5°	1362.6	1358.7	1341.9	1343.2	1339.4
30°	1317.4	1313.5	1294.2	1291.6	1287.7
32.5°	1268.4	1261.9	1245.2	1240.0	1232.3
35°	1216.8	1211.6	1193.5	1187.1	1176.8
37.5°	1163.9	1157.4	1140.6	1131.6	1125.2
40°	1109.7	1103.2	1085.2	1073.5	1069.7
42.5°	1051.6	1046.4	1028.4	1018.1	1011.6
45°	996.1	991.0	975.5	960.0	956.1
47.5°	935.5	936.8	917.4	901.9	892.9
50°	877.4	873.5	858.1	841.3	832.3
52.5°	818.1	815.5	798.7	784.5	774.2
55°	758.7	754.8	736.8	725.2	716.1
57.5°	695.5	694.2	678.7	663.2	659.4
60°	636.1	631.0	616.8	603.9	594.8
62.5°	574.2	570.3	558.7	544.5	538.1
65°	512.3	509.7	495.5	483.9	478.7
67.5°	451.6	446.5	436.1	425.8	423.2
70°	394.8	388.4	376.8	369.0	363.9
72.5°	332.9	329.0	322.6	313.5	308.4
75°	272.3	269.7	263.2	259.4	254.2
77.5°	215.5	214.2	210.3	207.7	203.9
80°	162.6	162.6	160.0	158.7	156.1
82.5°	116.1	113.5	113.5	111.0	111.0
85°	71.0	72.3	72.3	71.0	68.4
87.5°	34.8	34.8	33.5	33.5	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)