

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: P1004545

Luminaire Tested: S125DR-B1090DB40-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004545
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-B1090DB40-4F0-XX-W2A-F
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

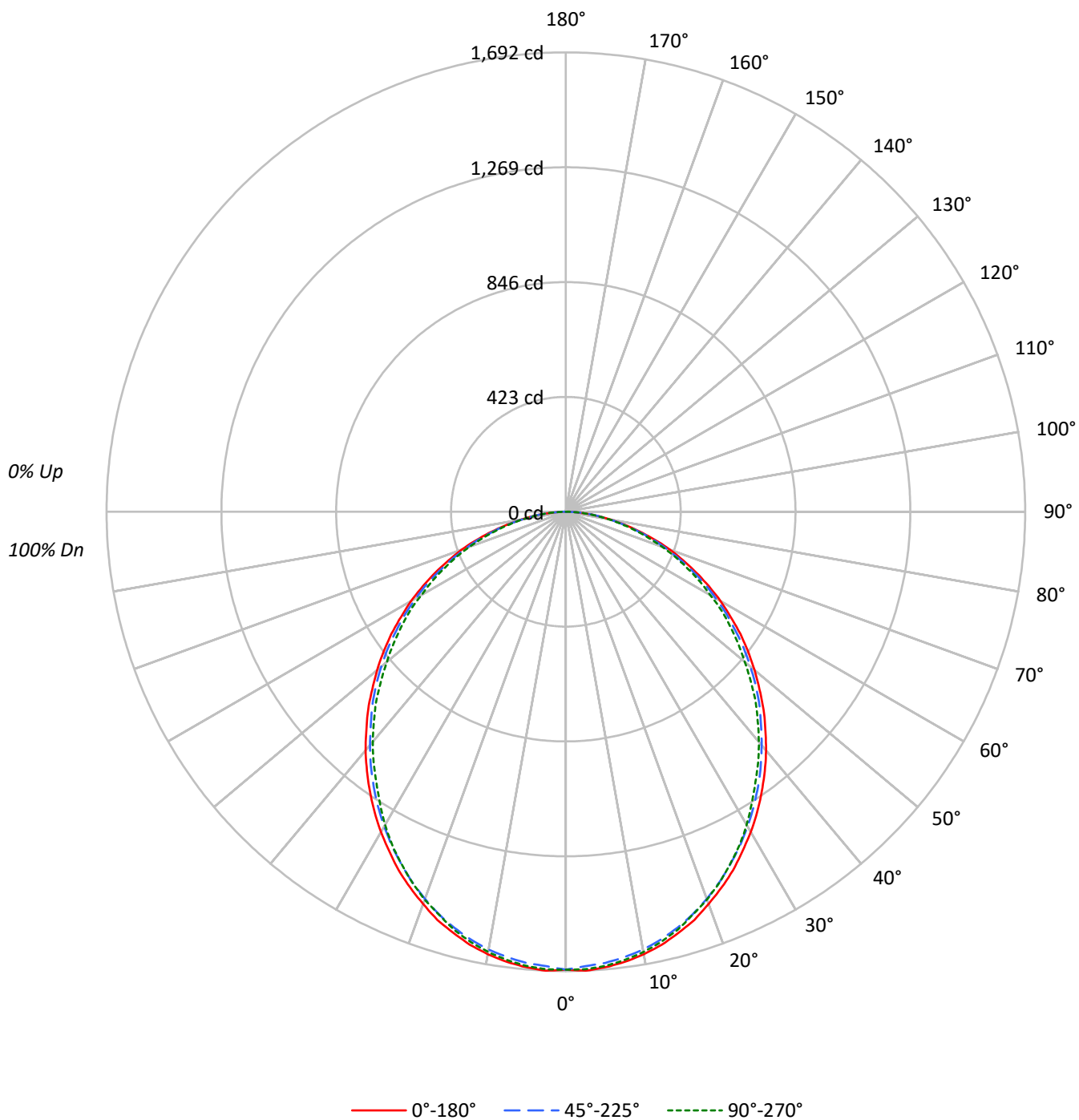
Lumens per Lamp: N/A
Luminaire Lumens: 4390.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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°	10807	10807	10807
5°	10831	10728	10797
10°	10765	10652	10713
15°	10648	10524	10569
20°	10481	10345	10363
25°	10302	10131	10122
30°	10079	9902	9852
35°	9842	9654	9519
40°	9598	9386	9252
45°	9335	9141	8960
50°	9045	8845	8579
55°	8764	8511	8273
60°	8430	8173	7883
65°	8032	7768	7506
70°	7649	7298	7049
75°	6971	6738	6508
80°	6202	6106	5959
85°	5396	5491	5197

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9335 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.2	3.6
10°-20°	449.6	10.2
20°-30°	663.7	15.1
30°-40°	774.4	17.6
40°-50°	777.7	17.7
50°-60°	682.7	15.6
60°-70°	508.5	11.6
70°-80°	290.4	6.6
80°-90°	83.8	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°	1272.4	29.0
0°-40°	2046.8	46.6
0°-60°	3507.2	79.9
0°-90°	4390.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4390.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1687	1687	1687	1687	1687	
5°	1684	1681	1668	1680	1679	160
15°	1605	1601	1587	1593	1593	453
25°	1457	1450	1433	1436	1432	670
35°	1258	1253	1234	1228	1217	787
45°	1030	1025	1009	993	989	794
55°	785	781	762	750	741	700
65°	530	527	512	500	495	525
75°	282	279	272	268	263	300
85°	73	75	75	73	71	85
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1686.7	1686.7	1686.7	1686.7	1686.7
2.5°	1692.0	1688.0	1674.7	1688.0	1686.7
5°	1684.0	1681.3	1668.0	1680.0	1678.7
7.5°	1672.0	1669.3	1654.6	1666.7	1665.3
10°	1654.6	1652.0	1637.3	1648.0	1646.6
12.5°	1633.3	1628.0	1614.6	1622.6	1622.6
15°	1605.3	1601.3	1586.6	1593.3	1593.3
17.5°	1575.9	1569.2	1554.6	1562.6	1555.9
20°	1537.2	1534.6	1517.2	1526.5	1519.9
22.5°	1498.5	1493.2	1477.2	1482.5	1478.5
25°	1457.2	1450.5	1433.1	1435.8	1431.8
27.5°	1409.1	1405.1	1387.8	1389.1	1385.1
30°	1362.4	1358.4	1338.4	1335.7	1331.7
32.5°	1311.7	1305.0	1287.7	1282.4	1274.3
35°	1258.3	1253.0	1234.3	1227.6	1217.0
37.5°	1203.6	1197.0	1179.6	1170.3	1163.6
40°	1147.6	1140.9	1122.2	1110.2	1106.2
42.5°	1087.5	1082.2	1063.5	1052.8	1046.2
45°	1030.2	1024.8	1008.8	992.8	988.8
47.5°	967.4	968.8	948.8	932.7	923.4
50°	907.4	903.4	887.4	870.0	860.7
52.5°	846.0	843.3	826.0	811.3	800.6
55°	784.6	780.6	761.9	749.9	740.6
57.5°	719.2	717.9	701.9	685.9	681.9
60°	657.9	652.5	637.8	624.5	615.2
62.5°	593.8	589.8	577.8	563.1	556.4
65°	529.8	527.1	512.4	500.4	495.1
67.5°	467.0	461.7	451.0	440.4	437.7
70°	408.3	401.7	389.6	381.6	376.3
72.5°	344.3	340.3	333.6	324.3	318.9
75°	281.6	278.9	272.2	268.2	262.9
77.5°	222.8	221.5	217.5	214.8	210.8
80°	168.1	168.1	165.5	164.1	161.5
82.5°	120.1	117.4	117.4	114.8	114.8
85°	73.4	74.7	74.7	73.4	70.7
87.5°	36.0	36.0	34.7	34.7	32.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)