

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: P1004558

Luminaire Tested: S125DR-B1270DB2750-4F0-XX-W2A-D_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004558
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DR-B1270DB2750-4F0-XX-W2A-D_3000K
Description: Define 5 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

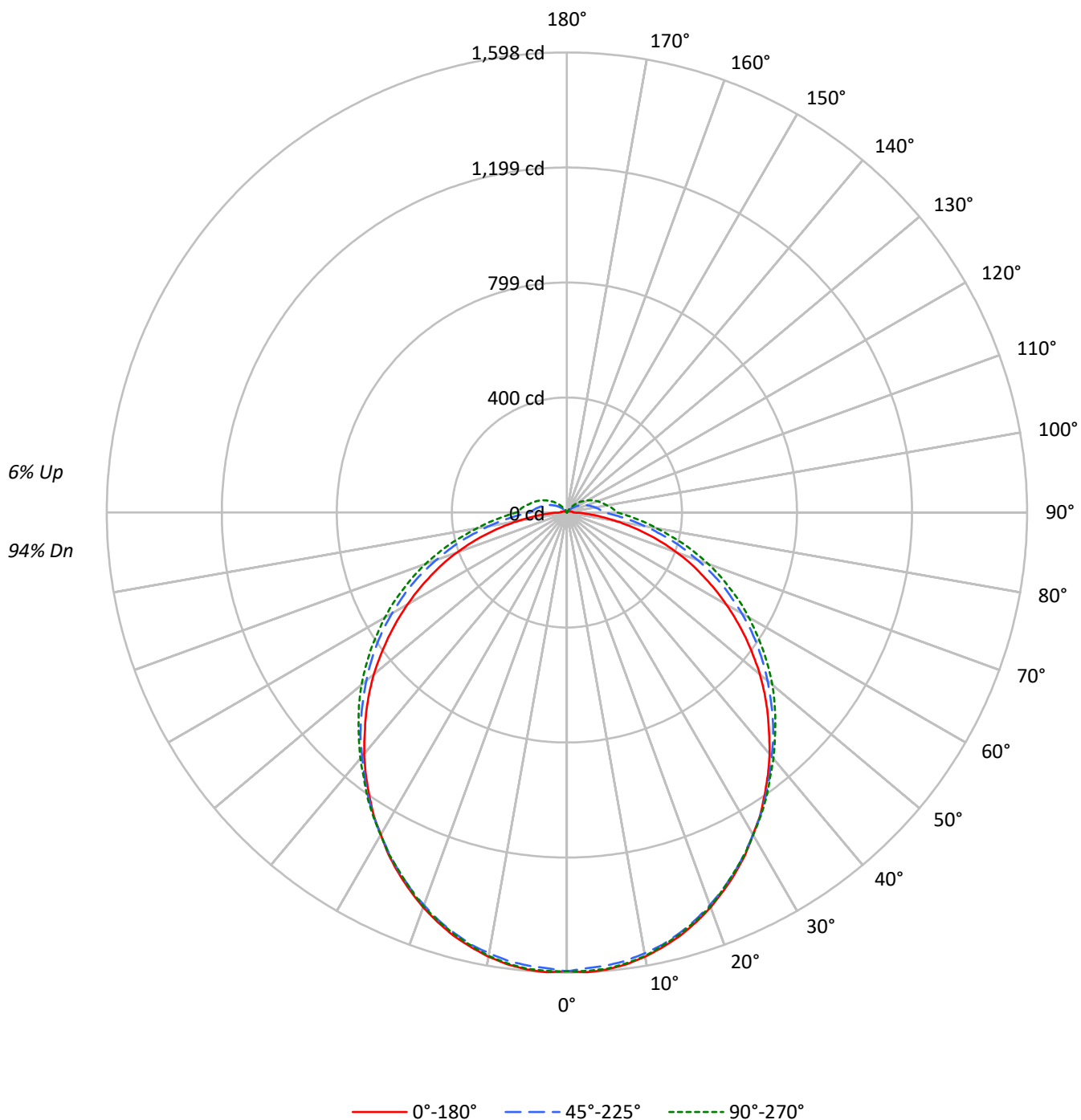
Lumens per Lamp: N/A
Luminaire Lumens: 4937.0 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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	30	10
RCR																	
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10211	10211	10211
5°	10250	10159	10230
10°	10195	10114	10175
15°	10094	10033	10053
20°	9950	9897	9929
25°	9776	9742	9731
30°	9559	9559	9571
35°	9361	9410	9447
40°	9161	9252	9331
45°	8933	9160	9273
50°	8722	9064	9282
55°	8465	9023	9285
60°	8188	8989	9351
65°	7912	9025	9475
70°	7609	9044	9777
75°	7117	9360	10328
80°	6516	10206	11704
85°	6315	14129	17577

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 30068 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	3.1
10°-20°	428.1	8.7
20°-30°	636.6	12.9
30°-40°	754.0	15.3
40°-50°	779.5	15.8
50°-60°	718.0	14.5
60°-70°	580.5	11.8
70°-80°	388.4	7.9
80°-90°	200.8	4.1
90°-100°	113.1	2.3
100°-110°	83.4	1.7
110°-120°	55.8	1.1
120°-130°	31.6	0.6
130°-140°	13.8	0.3
140°-150°	2.7	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1215.5	24.6
0°-40°	1969.5	39.9
0°-60°	3467.0	70.2
0°-90°	4636.6	93.9
90°-120°	252.2	5.1
90°-150°	300.4	6.1
90°-180°	300.0	6.1
0°-180°	4937.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1594	1591	1580	1592	1591	151
15°	1522	1523	1512	1522	1516	429
25°	1383	1388	1378	1384	1376	637
35°	1197	1208	1203	1208	1208	749
45°	986	1003	1011	1022	1023	761
55°	758	783	808	825	831	677
65°	522	558	595	619	625	518
75°	288	328	378	409	417	305
85°	86	138	192	227	239	90
90°	25	75	128	164	175	17
95°	20	61	114	148	159	16
105°	14	39	86	117	128	15
115°	9	20	61	89	98	9
125°	6	5	36	61	69	5
135°	3	2	12	33	41	2
145°	2	0	0	8	14	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1593.7	1593.7	1593.7	1593.7	1593.7
2.5°	1598.4	1595.3	1584.3	1595.3	1593.7
5°	1593.7	1590.6	1579.6	1592.1	1590.6
7.5°	1582.8	1581.2	1570.3	1581.2	1579.6
10°	1567.1	1567.1	1554.6	1565.6	1564.0
12.5°	1545.3	1546.8	1537.5	1545.3	1540.6
15°	1521.8	1523.4	1512.5	1521.8	1515.6
17.5°	1492.1	1495.3	1484.3	1492.1	1487.5
20°	1459.3	1462.5	1451.5	1456.2	1456.2
22.5°	1421.8	1428.1	1415.6	1421.8	1417.1
25°	1382.8	1387.5	1378.1	1384.3	1376.5
27.5°	1340.6	1346.8	1335.9	1340.6	1337.5
30°	1292.1	1301.5	1292.1	1295.3	1293.7
32.5°	1248.4	1256.2	1250.0	1253.1	1251.5
35°	1196.8	1207.8	1203.1	1207.8	1207.8
37.5°	1146.8	1156.2	1154.7	1160.9	1159.3
40°	1095.3	1107.8	1106.2	1112.5	1115.6
42.5°	1039.0	1056.2	1060.9	1068.7	1068.7
45°	985.9	1003.1	1010.9	1021.8	1023.4
47.5°	931.2	946.8	959.3	975.0	978.1
50°	875.0	892.2	909.3	926.5	931.2
52.5°	815.6	837.5	859.3	878.1	881.2
55°	757.8	782.8	807.8	825.0	831.2
57.5°	698.4	728.1	756.2	775.0	779.7
60°	639.0	670.3	701.5	725.0	729.7
62.5°	581.2	612.5	646.9	673.4	679.7
65°	521.9	557.8	595.3	618.7	625.0
67.5°	467.2	501.5	539.0	567.2	575.0
70°	406.2	442.2	482.8	512.5	521.9
72.5°	346.9	384.4	429.7	462.5	468.7
75°	287.5	328.1	378.1	409.4	417.2
77.5°	229.7	276.6	323.4	357.8	364.1
80°	176.6	223.4	276.6	310.9	317.2
82.5°	128.1	178.1	232.8	265.6	278.1
85°	85.9	137.5	192.2	226.6	239.1
87.5°	54.7	104.7	157.8	193.7	204.7
90°	25.0	75.0	128.1	164.1	175.0
92.5°	21.9	67.2	121.9	156.2	167.2
95°	20.3	60.9	114.1	148.4	159.4
97.5°	18.7	56.2	107.8	140.6	151.6
100°	17.2	50.0	100.0	132.8	142.2
102.5°	15.6	45.3	93.7	125.0	134.4
105°	14.1	39.1	85.9	117.2	128.1
107.5°	12.5	34.4	79.7	110.9	120.3
110°	10.9	29.7	73.4	103.1	114.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.9	25.0	67.2	95.3	106.2
115°	9.4	20.3	60.9	89.1	98.4
117.5°	7.8	15.6	54.7	81.2	92.2
120°	7.8	12.5	48.4	75.0	84.4
122.5°	6.2	7.8	42.2	67.2	76.6
125°	6.2	4.7	35.9	60.9	68.7
127.5°	4.7	3.1	29.7	53.1	62.5
130°	4.7	3.1	25.0	46.9	54.7
132.5°	3.1	3.1	18.7	40.6	46.9
135°	3.1	1.6	12.5	32.8	40.6
137.5°	3.1	1.6	7.8	26.6	32.8
140°	1.6	1.6	3.1	20.3	26.6
142.5°	1.6	0.0	0.0	14.1	20.3
145°	1.6	0.0	0.0	7.8	14.1
147.5°	0.0	0.0	0.0	3.1	6.2
150°	0.0	0.0	0.0	0.0	1.6
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)