

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: P1004560

Luminaire Tested: S125DR-B1270DB2750-4F0-XX-W2A-D_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004560
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_4000K
Description: Define 5 Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

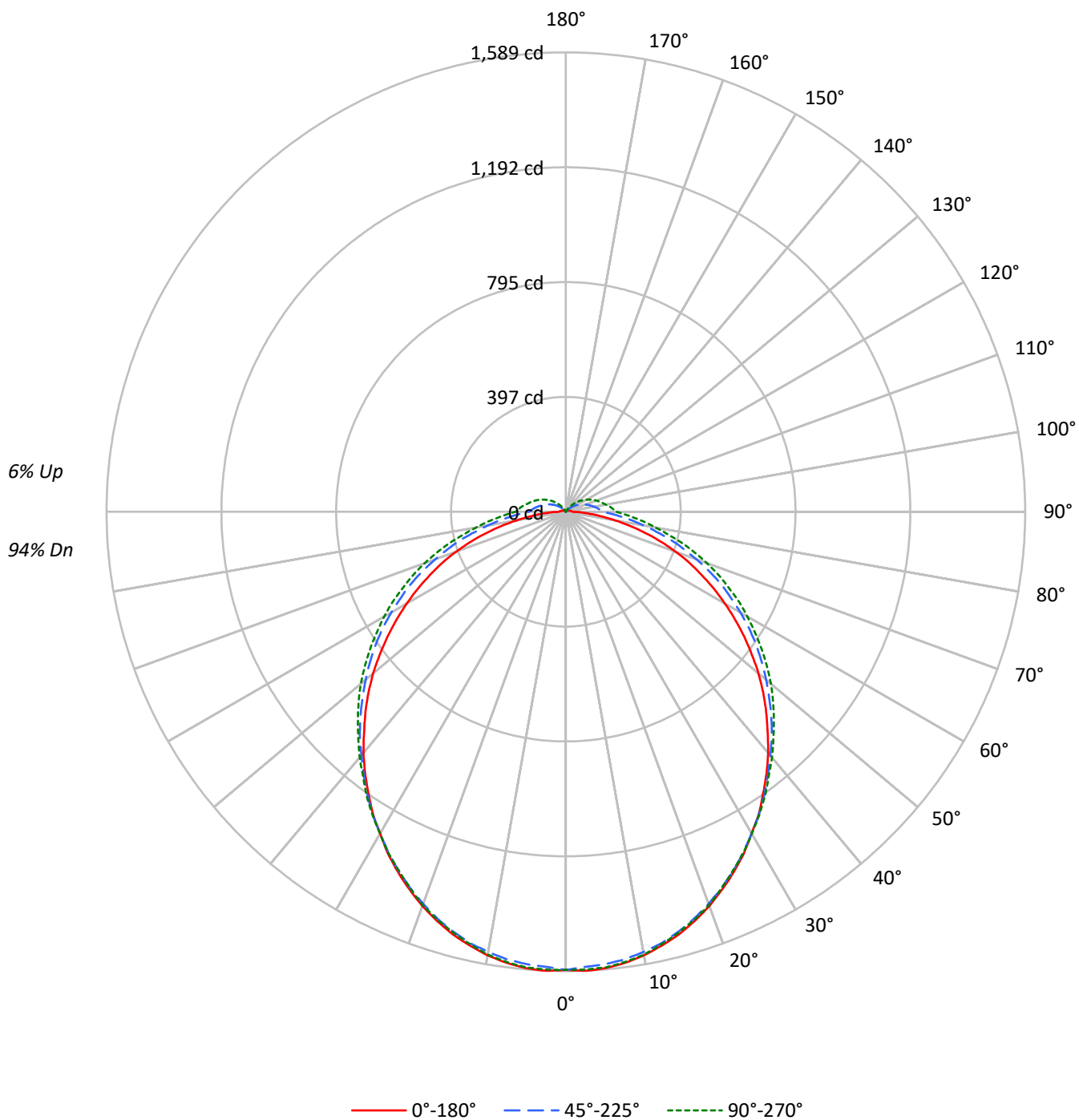
Lumens per Lamp: N/A
Luminaire Lumens: 4909.0 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1004560

CATALOG NUMBER: S125DR-B1270DB2750-4F0-XX-W2A-D_4000K

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	50	30	10
RCR																				
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	79	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	65	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	55	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	47	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	41	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	36	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	32	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	29	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	26	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	23	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10153	10153	10153
5°	10192	10102	10172
10°	10138	10057	10117
15°	10037	9976	9996
20°	9894	9841	9872
25°	9720	9687	9676
30°	9505	9505	9517
35°	9308	9357	9393
40°	9109	9199	9278
45°	8882	9108	9220
50°	8672	9013	9229
55°	8417	8972	9232
60°	8142	8939	9297
65°	7867	8973	9421
70°	7566	8994	9721
75°	7077	9308	10268
80°	6479	10147	11637
85°	6278	14048	17474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 29891 cd/sqm

TEST NUMBER: P1004560

CATALOG NUMBER: S125DR-B1270DB2750-4F0-XX-W2A-D_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.0	3.1
10°-20°	425.7	8.7
20°-30°	633.0	12.9
30°-40°	749.7	15.3
40°-50°	775.0	15.8
50°-60°	714.0	14.5
60°-70°	577.2	11.8
70°-80°	386.2	7.9
80°-90°	199.6	4.1
90°-100°	112.4	2.3
100°-110°	82.9	1.7
110°-120°	55.5	1.1
120°-130°	31.4	0.6
130°-140°	13.7	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°	1208.7	24.6
0°-40°	1958.3	39.9
0°-60°	3447.3	70.2
0°-90°	4610.3	93.9
90°-120°	250.8	5.1
90°-150°	298.7	6.1
90°-180°	299.0	6.1
0°-180°	4909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1585	1585	1585	1585	1585	
5°	1585	1582	1571	1583	1582	150
15°	1513	1515	1504	1513	1507	426
25°	1375	1380	1370	1376	1369	633
35°	1190	1201	1196	1201	1201	745
45°	980	997	1005	1016	1018	756
55°	754	778	803	820	826	673
65°	519	555	592	615	621	515
75°	286	326	376	407	415	303
85°	85	137	191	225	238	89
90°	25	75	127	163	174	17
95°	20	61	113	148	158	16
105°	14	39	85	116	127	15
115°	9	20	61	89	98	9
125°	6	5	36	61	68	5
135°	3	2	12	33	40	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

TEST NUMBER: P1004560

CATALOG NUMBER: S125DR-B1270DB2750-4F0-XX-W2A-D_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1584.7	1584.7	1584.7	1584.7	1584.7
2.5°	1589.3	1586.2	1575.3	1586.2	1584.7
5°	1584.7	1581.6	1570.7	1583.1	1581.6
7.5°	1573.8	1572.2	1561.4	1572.2	1570.7
10°	1558.2	1558.2	1545.8	1556.7	1555.1
12.5°	1536.5	1538.1	1528.7	1536.5	1531.8
15°	1513.2	1514.7	1503.9	1513.2	1507.0
17.5°	1483.7	1486.8	1475.9	1483.7	1479.0
20°	1451.1	1454.2	1443.3	1447.9	1447.9
22.5°	1413.8	1420.0	1407.6	1413.8	1409.1
25°	1374.9	1379.6	1370.3	1376.5	1368.7
27.5°	1333.0	1339.2	1328.3	1333.0	1329.9
30°	1284.8	1294.1	1284.8	1287.9	1286.4
32.5°	1241.3	1249.1	1242.9	1246.0	1244.4
35°	1190.0	1200.9	1196.3	1200.9	1200.9
37.5°	1140.3	1149.7	1148.1	1154.3	1152.8
40°	1089.1	1101.5	1099.9	1106.2	1109.3
42.5°	1033.1	1050.2	1054.9	1062.7	1062.7
45°	980.3	997.4	1005.2	1016.0	1017.6
47.5°	925.9	941.5	953.9	969.4	972.5
50°	870.0	887.1	904.2	921.3	925.9
52.5°	811.0	832.7	854.5	873.1	876.2
55°	753.5	778.3	803.2	820.3	826.5
57.5°	694.5	724.0	751.9	770.6	775.2
60°	635.4	666.5	697.6	720.9	725.5
62.5°	577.9	609.0	643.2	669.6	675.8
65°	518.9	554.6	591.9	615.2	621.4
67.5°	464.5	498.7	536.0	564.0	571.7
70°	403.9	439.7	480.1	509.6	518.9
72.5°	344.9	382.2	427.2	459.9	466.1
75°	285.9	326.3	376.0	407.0	414.8
77.5°	228.4	275.0	321.6	355.8	362.0
80°	175.6	222.2	275.0	309.2	315.4
82.5°	127.4	177.1	231.5	264.1	276.5
85°	85.4	136.7	191.1	225.3	237.7
87.5°	54.4	104.1	156.9	192.6	203.5
90°	24.9	74.6	127.4	163.1	174.0
92.5°	21.8	66.8	121.2	155.4	166.2
95°	20.2	60.6	113.4	147.6	158.5
97.5°	18.6	55.9	107.2	139.8	150.7
100°	17.1	49.7	99.4	132.1	141.4
102.5°	15.5	45.1	93.2	124.3	133.6
105°	14.0	38.8	85.4	116.5	127.4
107.5°	12.4	34.2	79.2	110.3	119.6
110°	10.9	29.5	73.0	102.5	113.4



TEST NUMBER: P1004560

CATALOG NUMBER: S125DR-B1270DB2750-4F0-XX-W2A-D_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.9	24.9	66.8	94.8	105.6
115°	9.3	20.2	60.6	88.6	97.9
117.5°	7.8	15.5	54.4	80.8	91.7
120°	7.8	12.4	48.2	74.6	83.9
122.5°	6.2	7.8	41.9	66.8	76.1
125°	6.2	4.7	35.7	60.6	68.4
127.5°	4.7	3.1	29.5	52.8	62.1
130°	4.7	3.1	24.9	46.6	54.4
132.5°	3.1	3.1	18.6	40.4	46.6
135°	3.1	1.6	12.4	32.6	40.4
137.5°	3.1	1.6	7.8	26.4	32.6
140°	1.6	1.6	3.1	20.2	26.4
142.5°	1.6	0.0	0.0	14.0	20.2
145°	1.6	0.0	0.0	7.8	14.0
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)