

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: P1004557

Luminaire Tested: S125DR-B1270DB2750-4F0-XX-W2A-D_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P1004557
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_2700K
Description: Define 5 Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

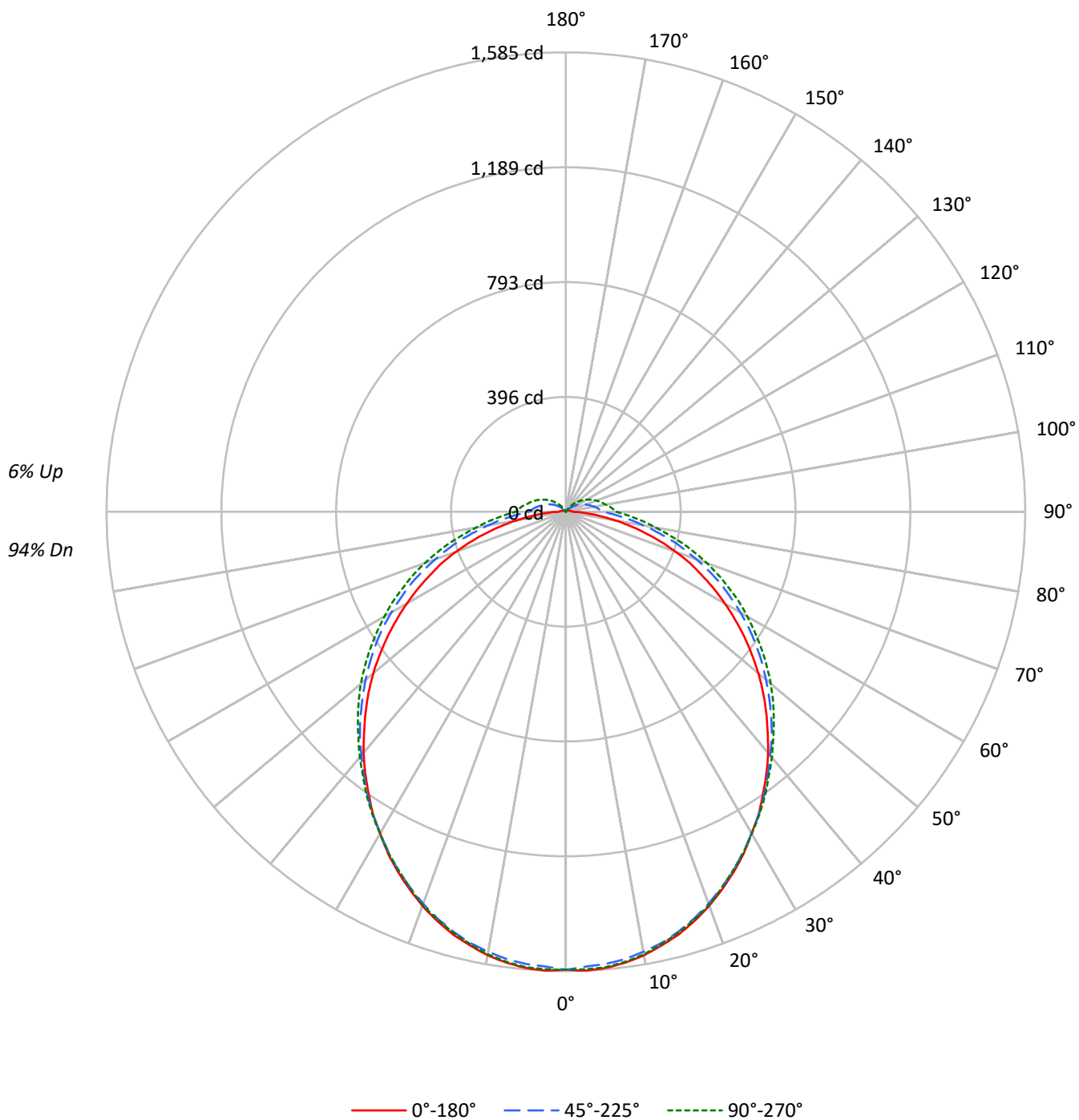
Lumens per Lamp: N/A
Luminaire Lumens: 4895.0 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V): 120
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	50	30	10
RCR																				
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94		
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76		
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63		
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53		
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45		
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39		
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34		
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30		
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27		
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24		
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10124	10124	10124
5°	10163	10073	10143
10°	10109	10028	10089
15°	10009	9947	9968
20°	9865	9813	9844
25°	9692	9660	9648
30°	9479	9479	9490
35°	9282	9330	9366
40°	9083	9173	9251
45°	8857	9082	9194
50°	8647	8987	9203
55°	8392	8946	9207
60°	8119	8914	9271
65°	7844	8948	9395
70°	7546	8968	9692
75°	7055	9281	10239
80°	6461	10117	11604
85°	6263	14004	17423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 87.5°

Luminance: 29803 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.5	3.1
10°-20°	424.5	8.7
20°-30°	631.2	12.9
30°-40°	747.5	15.3
40°-50°	772.8	15.8
50°-60°	711.9	14.5
60°-70°	575.5	11.8
70°-80°	385.1	7.9
80°-90°	199.0	4.1
90°-100°	112.1	2.3
100°-110°	82.6	1.7
110°-120°	55.3	1.1
120°-130°	31.3	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°	1205.2	24.6
0°-40°	1952.7	39.9
0°-60°	3437.5	70.2
0°-90°	4597.2	93.9
90°-120°	250.1	5.1
90°-150°	297.8	6.1
90°-180°	298.0	6.1
0°-180°	4895.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1580	1580	1580	1580	1580	
5°	1580	1577	1566	1579	1577	150
15°	1509	1510	1500	1509	1503	425
25°	1371	1376	1366	1373	1365	631
35°	1187	1198	1193	1198	1198	743
45°	978	995	1002	1013	1015	754
55°	751	776	801	818	824	672
65°	517	553	590	614	620	513
75°	285	325	375	406	414	302
85°	85	136	190	225	237	89
90°	25	74	127	163	174	17
95°	20	60	113	147	158	16
105°	14	39	85	116	127	15
115°	9	20	60	88	98	9
125°	6	5	36	60	68	5
135°	3	2	12	32	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

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1580.1	1580.1	1580.1	1580.1	1580.1
2.5°	1584.8	1581.7	1570.8	1581.7	1580.1
5°	1580.1	1577.0	1566.2	1578.6	1577.0
7.5°	1569.3	1567.7	1556.9	1567.7	1566.2
10°	1553.8	1553.8	1541.4	1552.3	1550.7
12.5°	1532.1	1533.7	1524.4	1532.1	1527.5
15°	1508.9	1510.4	1499.6	1508.9	1502.7
17.5°	1479.4	1482.5	1471.7	1479.4	1474.8
20°	1446.9	1450.0	1439.2	1443.8	1443.8
22.5°	1409.7	1415.9	1403.5	1409.7	1405.1
25°	1371.0	1375.7	1366.4	1372.6	1364.8
27.5°	1329.2	1335.4	1324.5	1329.2	1326.1
30°	1281.2	1290.4	1281.2	1284.3	1282.7
32.5°	1237.8	1245.5	1239.3	1242.4	1240.9
35°	1186.7	1197.5	1192.9	1197.5	1197.5
37.5°	1137.1	1146.4	1144.8	1151.0	1149.5
40°	1086.0	1098.4	1096.8	1103.0	1106.1
42.5°	1030.2	1047.2	1051.9	1059.6	1059.6
45°	977.5	994.6	1002.3	1013.1	1014.7
47.5°	923.3	938.8	951.2	966.7	969.8
50°	867.5	884.6	901.6	918.7	923.3
52.5°	808.7	830.3	852.0	870.6	873.7
55°	751.3	776.1	800.9	818.0	824.2
57.5°	692.5	721.9	749.8	768.4	773.0
60°	633.6	664.6	695.6	718.8	723.5
62.5°	576.3	607.3	641.4	667.7	673.9
65°	517.4	553.0	590.2	613.5	619.7
67.5°	463.2	497.3	534.5	562.3	570.1
70°	402.8	438.4	478.7	508.1	517.4
72.5°	343.9	381.1	426.0	458.6	464.7
75°	285.0	325.3	374.9	405.9	413.6
77.5°	227.7	274.2	320.7	354.8	361.0
80°	175.1	221.5	274.2	308.3	314.5
82.5°	127.0	176.6	230.8	263.4	275.8
85°	85.2	136.3	190.5	224.6	237.0
87.5°	54.2	103.8	156.5	192.1	202.9
90°	24.8	74.4	127.0	162.7	173.5
92.5°	21.7	66.6	120.8	154.9	165.8
95°	20.1	60.4	113.1	147.2	158.0
97.5°	18.6	55.8	106.9	139.4	150.3
100°	17.0	49.6	99.1	131.7	141.0
102.5°	15.5	44.9	92.9	123.9	133.2
105°	13.9	38.7	85.2	116.2	127.0
107.5°	12.4	34.1	79.0	110.0	119.3
110°	10.8	29.4	72.8	102.2	113.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.8	24.8	66.6	94.5	105.3
115°	9.3	20.1	60.4	88.3	97.6
117.5°	7.7	15.5	54.2	80.6	91.4
120°	7.7	12.4	48.0	74.4	83.7
122.5°	6.2	7.7	41.8	66.6	75.9
125°	6.2	4.6	35.6	60.4	68.2
127.5°	4.6	3.1	29.4	52.7	62.0
130°	4.6	3.1	24.8	46.5	54.2
132.5°	3.1	3.1	18.6	40.3	46.5
135°	3.1	1.5	12.4	32.5	40.3
137.5°	3.1	1.5	7.7	26.3	32.5
140°	1.5	1.5	3.1	20.1	26.3
142.5°	1.5	0.0	0.0	13.9	20.1
145°	1.5	0.0	0.0	7.7	13.9
147.5°	0.0	0.0	0.0	3.1	6.2
150°	0.0	0.0	0.0	0.0	1.5
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)