

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: P1004652

Luminaire Tested: S125DR-B850DB2750-4F0-XX-W2A-F\_2700K

Issue Date: 5/2/2025

**Test Information**

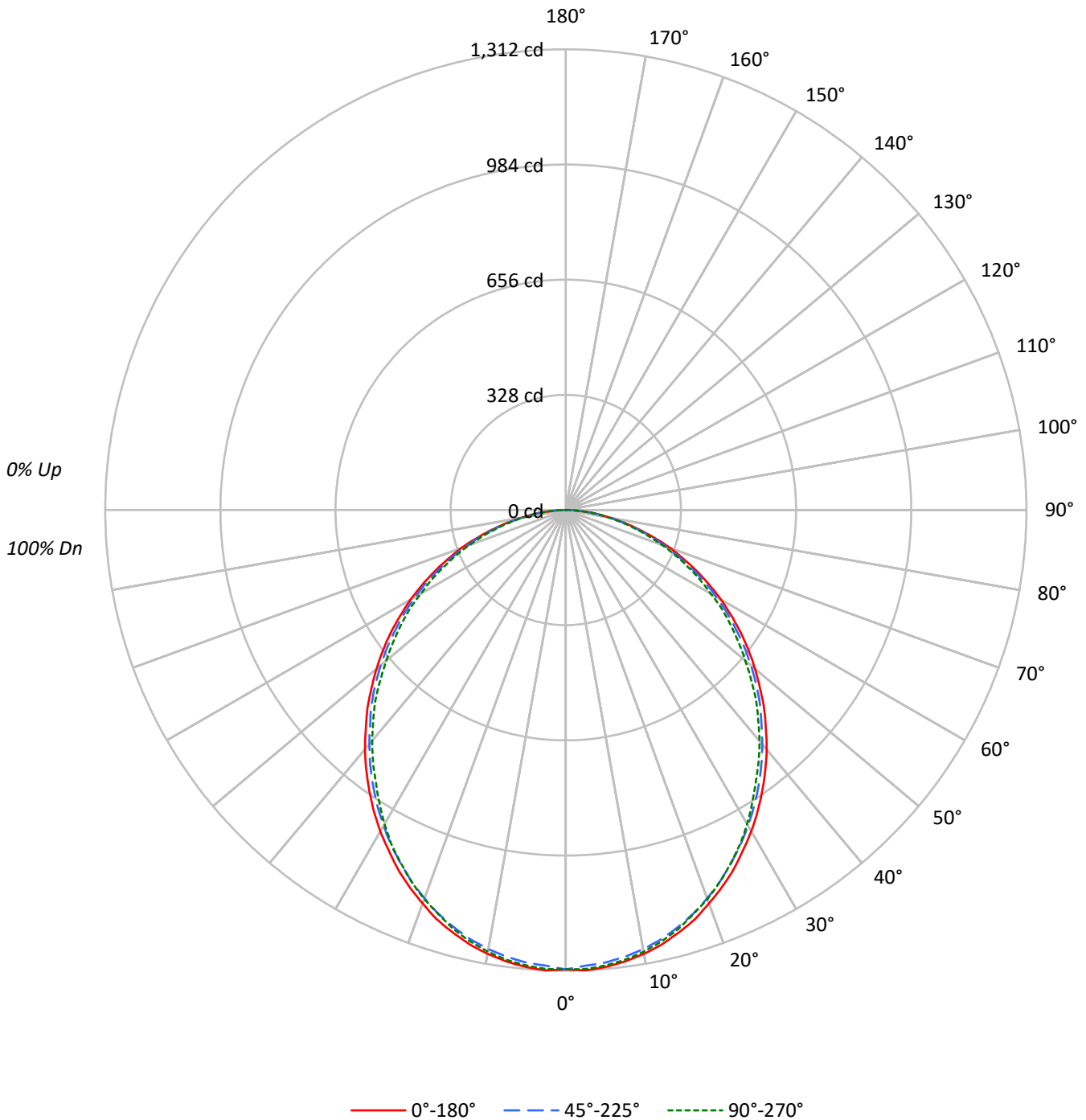
Test Method: LM-79-2019  
Report Number: P1004652  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/2/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DR-B850DB2750-4F0-XX-W2A-F\_2700K  
Description: 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: 3405.0 lumens  
Efficiency: N/A  
Efficacy: 94.8 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): 35.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8382	8382	8382
5°	8401	8321	8374
10°	8350	8262	8309
15°	8259	8163	8197
20°	8129	8024	8038
25°	7990	7858	7851
30°	7818	7680	7642
35°	7634	7488	7383
40°	7445	7280	7176
45°	7240	7090	6949
50°	7015	6861	6654
55°	6798	6602	6416
60°	6539	6339	6114
65°	6229	6025	5822
70°	5933	5661	5468
75°	5407	5226	5048
80°	4811	4734	4620
85°	4183	4264	4036

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7240 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.4	3.6
10°-20°	348.7	10.2
20°-30°	514.8	15.1
30°-40°	600.6	17.6
40°-50°	603.2	17.7
50°-60°	529.5	15.6
60°-70°	394.4	11.6
70°-80°	225.2	6.6
80°-90°	65.0	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°	986.9	29.0
0°-40°	1587.5	46.6
0°-60°	2720.3	79.9
0°-90°	3405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3405.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1306	1304	1294	1303	1302	124
15°	1245	1242	1231	1236	1236	351
25°	1130	1125	1112	1114	1110	520
35°	976	972	957	952	944	611
45°	799	795	782	770	767	616
55°	609	606	591	582	574	543
65°	411	409	397	388	384	408
75°	218	216	211	208	204	232
85°	57	58	58	57	55	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1308.2	1308.2	1308.2	1308.2	1308.2
2.5°	1312.4	1309.3	1298.9	1309.3	1308.2
5°	1306.2	1304.1	1293.7	1303.1	1302.0
7.5°	1296.8	1294.8	1283.4	1292.7	1291.7
10°	1283.4	1281.3	1269.9	1278.2	1277.2
12.5°	1266.8	1262.7	1252.3	1258.6	1258.6
15°	1245.1	1242.0	1230.6	1235.8	1235.8
17.5°	1222.3	1217.2	1205.8	1212.0	1206.8
20°	1192.3	1190.2	1176.8	1184.0	1178.9
22.5°	1162.3	1158.2	1145.7	1149.9	1146.8
25°	1130.2	1125.0	1111.6	1113.7	1110.5
27.5°	1093.0	1089.8	1076.4	1077.4	1074.3
30°	1056.7	1053.6	1038.1	1036.0	1032.9
32.5°	1017.4	1012.2	998.8	994.6	988.4
35°	976.0	971.9	957.4	952.2	943.9
37.5°	933.6	928.4	914.9	907.7	902.5
40°	890.1	884.9	870.4	861.1	858.0
42.5°	843.5	839.4	824.9	816.6	811.4
45°	799.0	794.9	782.5	770.0	766.9
47.5°	750.4	751.4	735.9	723.5	716.2
50°	703.8	700.7	688.3	674.8	667.6
52.5°	656.2	654.1	640.7	629.3	621.0
55°	608.6	605.5	591.0	581.7	574.4
57.5°	557.9	556.8	544.4	532.0	528.9
60°	510.3	506.1	494.7	484.4	477.1
62.5°	460.6	457.5	448.2	436.8	431.6
65°	410.9	408.8	397.4	388.1	384.0
67.5°	362.2	358.1	349.8	341.5	339.5
70°	316.7	311.5	302.2	296.0	291.9
72.5°	267.0	263.9	258.7	251.5	247.4
75°	218.4	216.3	211.1	208.0	203.9
77.5°	172.8	171.8	168.7	166.6	163.5
80°	130.4	130.4	128.3	127.3	125.2
82.5°	93.1	91.1	91.1	89.0	89.0
85°	56.9	58.0	58.0	56.9	54.9
87.5°	27.9	27.9	26.9	26.9	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)