

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: P1061545

Luminaire Tested: S125RDR-S1270D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061545  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1270D850-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

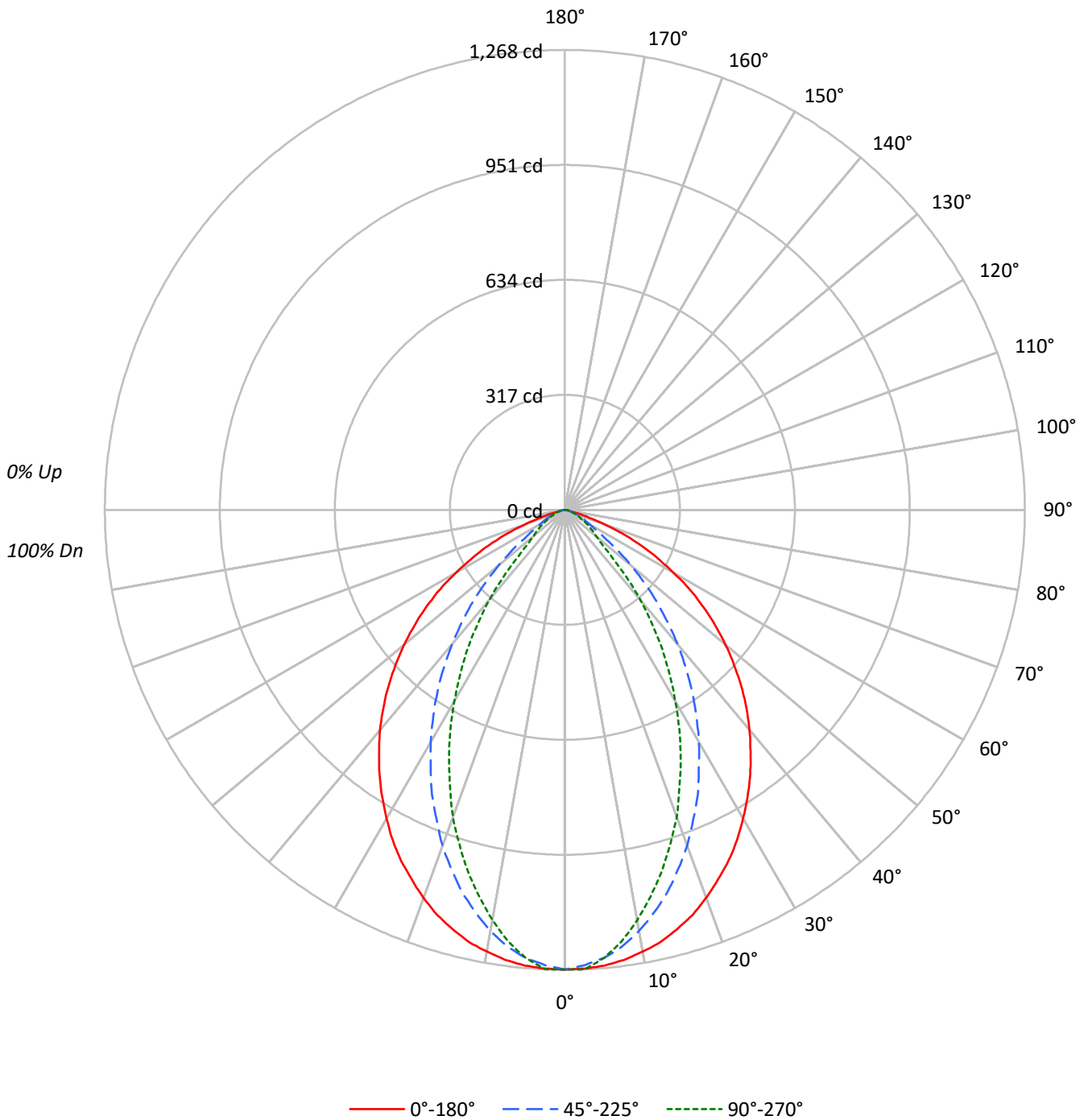
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1833.0 lumens  
Efficiency: N/A  
Efficacy: 43.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
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	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	100				
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52				
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43				
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36				

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

	0°	45°	90°
0°	8727	8727	8727
5°	8715	8571	8571
10°	8648	8242	8028
15°	8530	7783	7358
20°	8343	7222	6608
25°	8112	6582	5738
30°	7810	5877	4840
35°	7486	5144	3925
40°	7122	4342	2909
45°	6696	3481	1757
50°	6193	2554	1207
55°	5587	1567	1005
60°	4745	1064	799
65°	3752	813	630
70°	2367	584	519
75°	771	428	428
80°	254	321	385
85°	126	253	253

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6696 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	6.4
10°-20°	309.6	16.9
20°-30°	407.2	22.2
30°-40°	400.1	21.8
40°-50°	302.7	16.5
50°-60°	183.5	10.0
60°-70°	86.7	4.7
70°-80°	22.6	1.2
80°-90°	3.4	0.2
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°	834.0	45.5
0°-40°	1234.1	67.3
0°-60°	1720.4	93.9
0°-90°	1833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1833.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1261	1258	1240	1242	1240	120
15°	1197	1164	1092	1050	1032	337
25°	1068	987	866	786	755	491
35°	891	771	612	504	467	556
45°	688	541	358	227	180	530
55°	465	319	130	89	84	414
65°	230	118	50	42	39	227
75°	29	19	16	16	16	45
85°	2	2	3	3	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1267.5	1267.5	1267.5	1267.5	1267.5
2.5°	1265.9	1265.9	1256.2	1267.5	1267.5
5°	1261.0	1257.8	1240.1	1241.7	1240.1
7.5°	1251.4	1244.9	1214.3	1206.3	1199.8
10°	1236.9	1224.0	1178.9	1159.6	1148.3
12.5°	1220.8	1198.2	1137.0	1109.6	1091.9
15°	1196.6	1164.4	1091.9	1050.0	1032.3
17.5°	1170.8	1124.1	1038.8	988.8	966.3
20°	1138.6	1083.9	985.6	924.4	901.9
22.5°	1103.2	1038.8	924.4	856.8	826.2
25°	1067.8	987.2	866.4	785.9	755.3
27.5°	1027.5	935.7	800.4	716.7	682.9
30°	982.4	884.2	739.2	652.3	608.8
32.5°	937.3	831.0	674.8	579.8	536.3
35°	890.6	771.4	612.0	504.1	467.0
37.5°	840.7	715.1	547.6	434.8	391.4
40°	792.4	658.7	483.1	364.0	323.7
42.5°	740.8	602.3	418.7	294.7	249.6
45°	687.7	541.1	357.5	227.1	180.4
47.5°	632.9	486.4	296.3	167.5	135.3
50°	578.2	428.4	238.4	124.0	112.7
52.5°	521.8	372.0	180.4	103.1	98.2
55°	465.4	318.9	130.5	88.6	83.7
57.5°	407.5	260.9	98.2	75.7	70.9
60°	344.6	209.4	77.3	62.8	58.0
62.5°	286.7	164.3	62.8	51.5	48.3
65°	230.3	117.6	49.9	41.9	38.7
67.5°	172.3	78.9	38.7	32.2	32.2
70°	117.6	51.5	29.0	25.8	25.8
72.5°	70.9	30.6	20.9	20.9	20.9
75°	29.0	19.3	16.1	16.1	16.1
77.5°	9.7	11.3	11.3	12.9	12.9
80°	6.4	6.4	8.1	9.7	9.7
82.5°	3.2	4.8	4.8	6.4	6.4
85°	1.6	1.6	3.2	3.2	3.2
87.5°	0.0	0.0	0.0	1.6	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)