

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: P1175350

Luminaire Tested: S125RDR-S1090D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175350  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1090D850-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

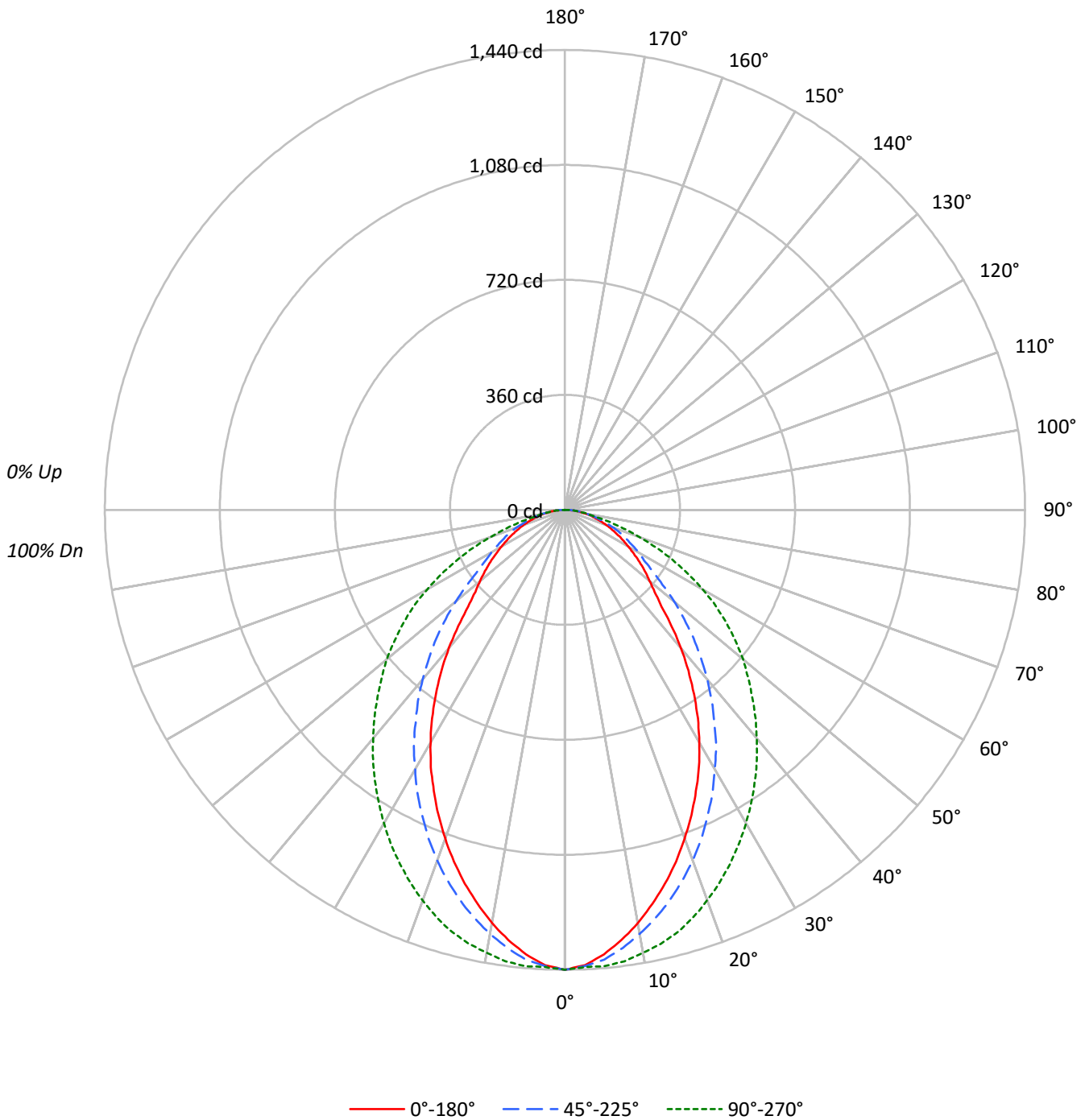
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2712.8 lumens  
Efficiency: N/A  
Efficacy: 77.5 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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			100	
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86			86	
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74			74	
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			64	
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44			44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40			40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36			36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33			33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30			30	

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

	0°	45°	90°
0°	9915	9915	9915
5°	9657	9767	9910
10°	9187	9427	9845
15°	8635	9027	9750
20°	8025	8562	9538
25°	7374	8023	9287
30°	6686	7454	9009
35°	5918	6853	8713
40°	5076	6230	8394
45°	4166	5546	8070
50°	3705	4766	7790
55°	3419	3991	7396
60°	3148	3635	6851
65°	2928	3425	6054
70°	2732	3199	4946
75°	2570	2958	3708
80°	2423	2716	2665
85°	2220	2702	2220

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8070 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.3	4.9
10°-20°	359.3	13.2
20°-30°	494.3	18.2
30°-40°	524.3	19.3
40°-50°	458.9	16.9
50°-60°	352.1	13.0
60°-70°	234.6	8.6
70°-80°	120.3	4.4
80°-90°	35.7	1.3
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°	987.0	36.4
0°-40°	1511.3	55.7
0°-60°	2322.3	85.6
0°-90°	2712.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2712.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1440	1440	1440	1440	1440	
5°	1397	1416	1413	1423	1434	131
15°	1211	1240	1266	1326	1368	339
25°	971	1004	1056	1145	1222	446
35°	704	737	815	935	1037	439
45°	428	463	570	711	829	338
55°	285	291	332	494	616	255
65°	180	181	210	276	372	179
75°	97	103	111	117	139	103
85°	28	32	34	33	28	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1440.0	1440.0	1440.0	1440.0	1440.0
2.5°	1426.5	1441.2	1430.2	1431.4	1432.6
5°	1397.2	1415.5	1413.1	1422.8	1433.8
7.5°	1358.1	1377.6	1383.7	1408.2	1425.3
10°	1314.1	1336.1	1348.3	1385.0	1408.2
12.5°	1263.9	1289.6	1309.2	1356.8	1391.1
15°	1211.4	1239.5	1266.4	1326.3	1367.8
17.5°	1155.1	1183.3	1218.7	1287.2	1337.3
20°	1095.3	1125.8	1168.6	1241.9	1301.8
22.5°	1034.1	1065.9	1114.8	1195.5	1263.9
25°	970.6	1003.6	1056.1	1145.4	1222.4
27.5°	908.2	938.8	999.9	1095.3	1179.6
30°	841.0	872.8	937.6	1042.7	1133.1
32.5°	773.8	805.5	880.1	990.1	1085.5
35°	704.1	737.1	815.3	935.1	1036.6
37.5°	634.4	668.6	755.4	878.9	986.5
40°	564.7	601.4	693.1	822.7	933.9
42.5°	493.8	533.0	629.5	767.7	882.6
45°	427.8	463.3	569.6	711.4	828.8
47.5°	380.2	400.9	506.1	654.0	777.4
50°	345.9	355.7	444.9	599.0	727.3
52.5°	315.4	321.5	385.0	547.6	672.3
55°	284.8	290.9	332.5	493.8	616.1
57.5°	255.5	259.1	293.4	440.1	559.8
60°	228.6	231.0	264.0	386.3	497.5
62.5°	204.1	205.4	235.9	331.3	435.2
65°	179.7	180.9	210.2	276.3	371.6
67.5°	157.7	157.7	185.8	226.1	310.5
70°	135.7	135.7	158.9	183.4	245.7
72.5°	116.1	118.6	134.5	147.9	191.9
75°	96.6	102.7	111.2	117.3	139.4
77.5°	78.2	85.6	89.2	91.7	92.9
80°	61.1	66.0	68.5	69.7	67.2
82.5°	45.2	48.9	50.1	50.1	46.5
85°	28.1	31.8	34.2	33.0	28.1
87.5°	13.4	18.3	19.6	17.1	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)