

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: P1175348

Luminaire Tested: S125RDR-S1090D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175348  
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-S1090D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

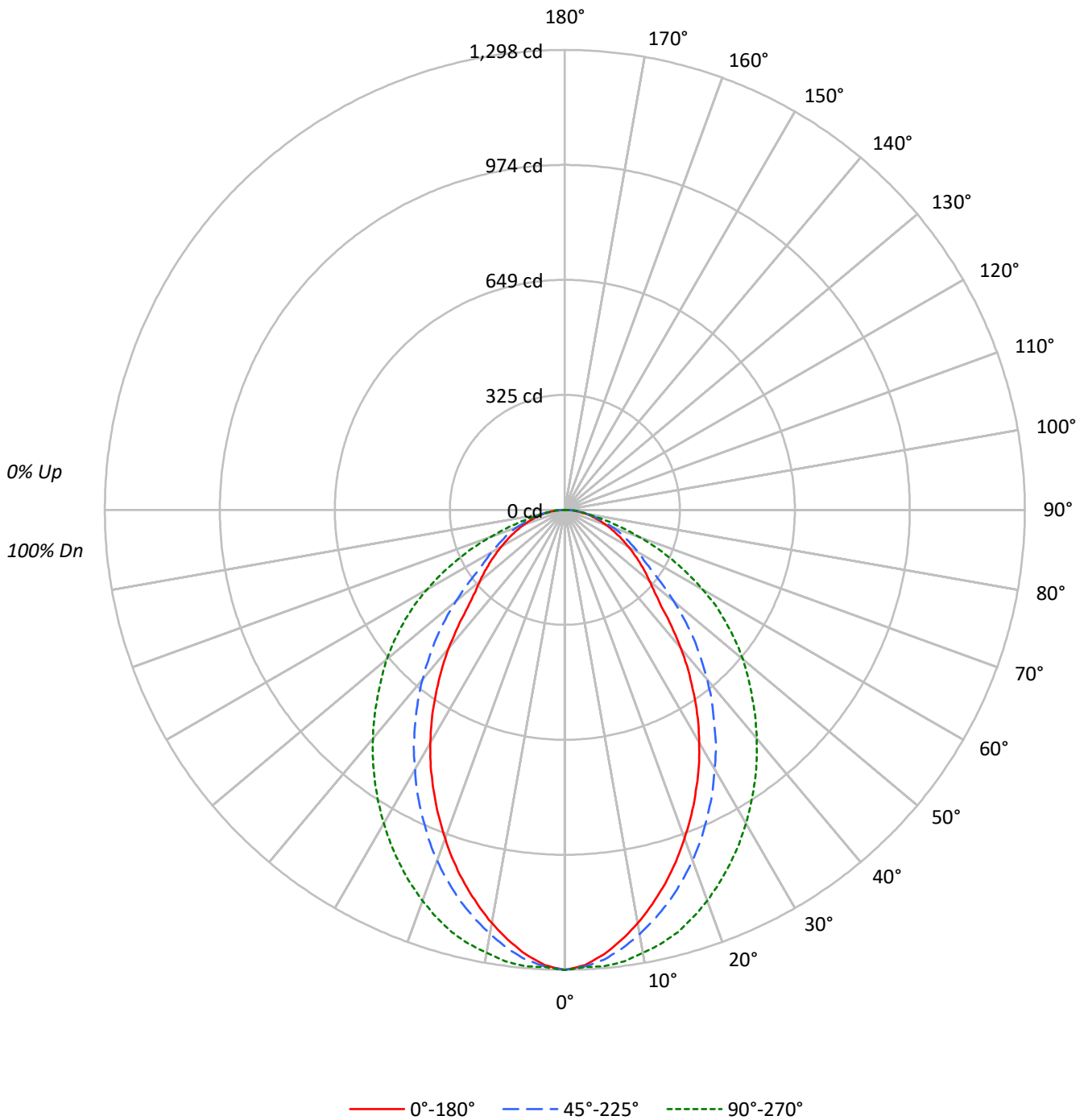
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2446.1 lumens  
Efficiency: N/A  
Efficacy: 69.9 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°	8940	8940	8940
5°	8708	8807	8936
10°	8284	8500	8878
15°	7786	8140	8792
20°	7236	7721	8601
25°	6649	7235	8373
30°	6029	6721	8124
35°	5337	6180	7856
40°	4577	5618	7569
45°	3757	5001	7277
50°	3341	4297	7025
55°	3083	3599	6668
60°	2838	3279	6177
65°	2639	3089	5459
70°	2462	2885	4459
75°	2317	2668	3344
80°	2185	2446	2403
85°	2007	2441	2007

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7277 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.2	4.9
10°-20°	324.0	13.2
20°-30°	445.7	18.2
30°-40°	472.8	19.3
40°-50°	413.8	16.9
50°-60°	317.5	13.0
60°-70°	211.5	8.6
70°-80°	108.4	4.4
80°-90°	32.2	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°	890.0	36.4
0°-40°	1362.7	55.7
0°-60°	2094.0	85.6
0°-90°	2446.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2446.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1260	1276	1274	1283	1293	118
15°	1092	1118	1142	1196	1233	306
25°	875	905	952	1033	1102	402
35°	635	665	735	843	935	396
45°	386	418	514	642	747	305
55°	257	262	300	445	556	230
65°	162	163	190	249	335	161
75°	87	93	100	106	126	93
85°	25	29	31	30	25	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1298.4	1298.4	1298.4	1298.4	1298.4
2.5°	1286.3	1299.5	1289.6	1290.7	1291.8
5°	1259.9	1276.4	1274.2	1283.0	1292.9
7.5°	1224.6	1242.2	1247.7	1269.8	1285.2
10°	1184.9	1204.7	1215.8	1248.8	1269.8
12.5°	1139.7	1162.9	1180.5	1223.5	1254.3
15°	1092.3	1117.7	1141.9	1195.9	1233.4
17.5°	1041.6	1067.0	1098.9	1160.7	1205.8
20°	987.6	1015.2	1053.7	1119.9	1173.9
22.5°	932.5	961.1	1005.2	1078.0	1139.7
25°	875.2	904.9	952.3	1032.8	1102.2
27.5°	819.0	846.5	901.6	987.6	1063.7
30°	758.3	787.0	845.4	940.2	1021.8
32.5°	697.7	726.4	793.6	892.8	978.8
35°	634.9	664.6	735.2	843.2	934.7
37.5°	572.1	602.9	681.2	792.5	889.5
40°	509.2	542.3	625.0	741.8	842.1
42.5°	445.3	480.6	567.7	692.2	795.8
45°	385.8	417.7	513.6	641.5	747.3
47.5°	342.8	361.5	456.3	589.7	701.0
50°	311.9	320.8	401.2	540.1	655.8
52.5°	284.4	289.9	347.2	493.8	606.2
55°	256.8	262.3	299.8	445.3	555.5
57.5°	230.4	233.7	264.5	396.8	504.8
60°	206.1	208.3	238.1	348.3	448.6
62.5°	184.1	185.2	212.7	298.7	392.4
65°	162.0	163.1	189.6	249.1	335.1
67.5°	142.2	142.2	167.5	203.9	280.0
70°	122.3	122.3	143.3	165.3	221.5
72.5°	104.7	106.9	121.2	133.4	173.1
75°	87.1	92.6	100.3	105.8	125.7
77.5°	70.5	77.2	80.5	82.7	83.8
80°	55.1	59.5	61.7	62.8	60.6
82.5°	40.8	44.1	45.2	45.2	41.9
85°	25.4	28.7	30.9	29.8	25.4
87.5°	12.1	16.5	17.6	15.4	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)