

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: P1175393

Luminaire Tested: S125RDR-H1090D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175393  
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-H1090D835-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

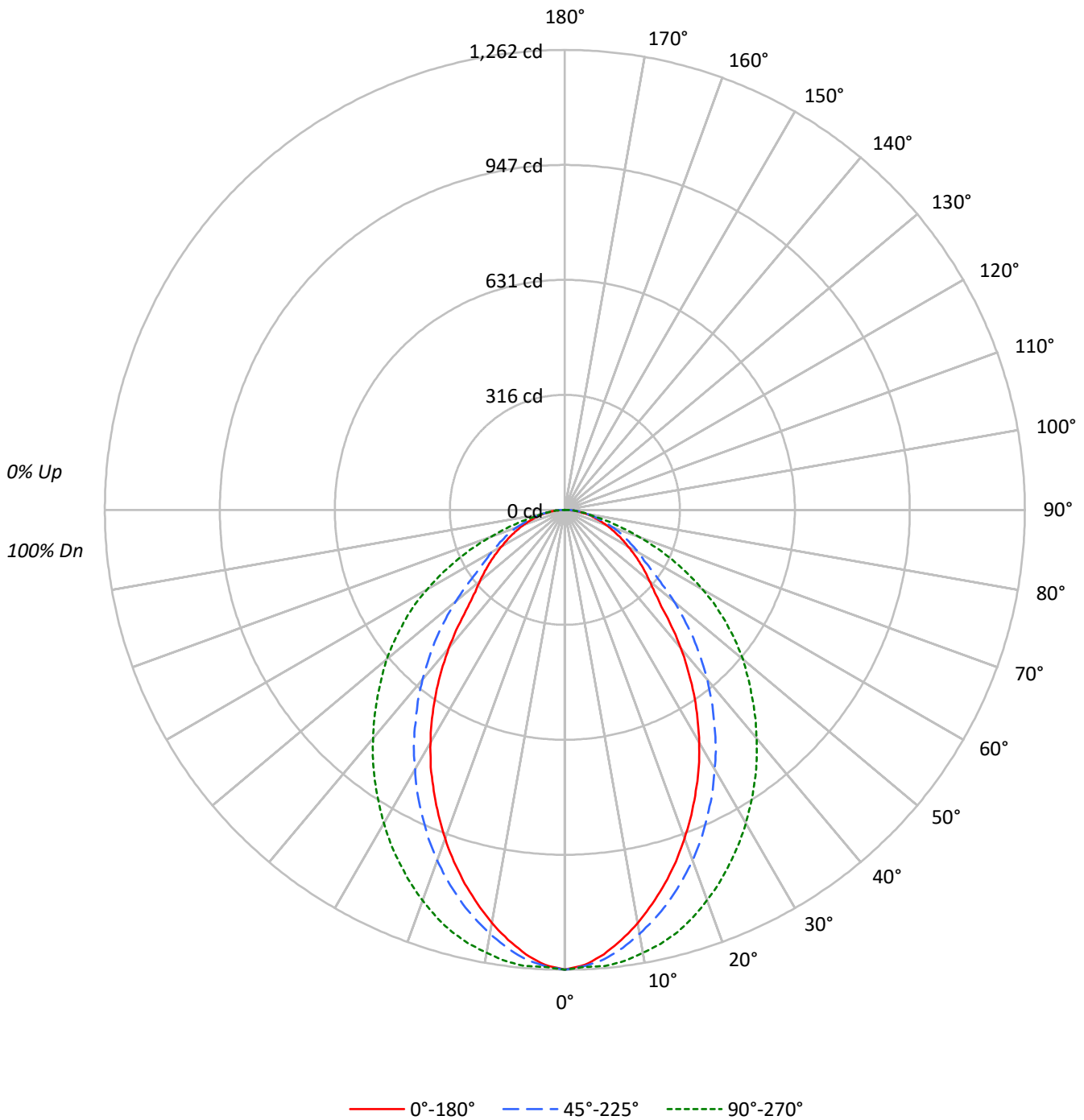
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2377.2 lumens  
Efficiency: N/A  
Efficacy: 76.2 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): 31.2  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

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

	0°	45°	90°
0°	8688	8688	8688
5°	8462	8559	8684
10°	8051	8260	8627
15°	7567	7910	8544
20°	7033	7503	8359
25°	6461	7031	8138
30°	5859	6532	7895
35°	5186	6006	7635
40°	4448	5459	7356
45°	3650	4861	7072
50°	3247	4176	6826
55°	2996	3498	6481
60°	2758	3186	6004
65°	2566	3001	5305
70°	2394	2804	4334
75°	2251	2594	3248
80°	2125	2379	2335
85°	1943	2370	1943

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7072 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.8	4.9
10°-20°	314.9	13.2
20°-30°	433.2	18.2
30°-40°	459.4	19.3
40°-50°	402.1	16.9
50°-60°	308.6	13.0
60°-70°	205.5	8.6
70°-80°	105.4	4.4
80°-90°	31.3	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°	864.9	36.4
0°-40°	1324.3	55.7
0°-60°	2035.0	85.6
0°-90°	2377.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2377.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1224	1240	1238	1247	1256	115
15°	1062	1086	1110	1162	1199	298
25°	850	879	926	1004	1071	391
35°	617	646	714	819	908	384
45°	375	406	499	623	726	296
55°	250	255	291	433	540	224
65°	158	158	184	242	326	157
75°	85	90	98	103	122	90
85°	25	28	30	29	25	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1261.8	1261.8	1261.8	1261.8	1261.8
2.5°	1250.1	1262.9	1253.3	1254.3	1255.4
5°	1224.3	1240.4	1238.3	1246.8	1256.5
7.5°	1190.1	1207.2	1212.6	1234.0	1249.0
10°	1151.5	1170.8	1181.5	1213.6	1234.0
12.5°	1107.6	1130.1	1147.2	1189.0	1219.0
15°	1061.5	1086.2	1109.7	1162.2	1198.6
17.5°	1012.3	1036.9	1068.0	1127.9	1171.9
20°	959.8	986.5	1024.0	1088.3	1140.8
22.5°	906.2	934.1	976.9	1047.6	1107.6
25°	850.5	879.4	925.5	1003.7	1071.2
27.5°	795.9	822.7	876.2	959.8	1033.7
30°	737.0	764.8	821.6	913.7	993.0
32.5°	678.0	705.9	771.2	867.6	951.2
35°	617.0	645.9	714.5	819.4	908.4
37.5°	555.9	585.9	662.0	770.2	864.4
40°	494.9	527.0	607.4	720.9	818.4
42.5°	432.8	467.0	551.7	672.7	773.4
45°	374.9	406.0	499.2	623.4	726.3
47.5°	333.1	351.3	443.5	573.1	681.3
50°	303.1	311.7	389.9	524.9	637.3
52.5°	276.4	281.7	337.4	479.9	589.1
55°	249.6	254.9	291.4	432.8	539.9
57.5°	223.9	227.1	257.1	385.6	490.6
60°	200.3	202.5	231.4	338.5	436.0
62.5°	178.9	180.0	206.7	290.3	381.3
65°	157.5	158.5	184.2	242.1	325.6
67.5°	138.2	138.2	162.8	198.2	272.1
70°	118.9	118.9	139.3	160.7	215.3
72.5°	101.8	103.9	117.8	129.6	168.2
75°	84.6	90.0	97.5	102.8	122.1
77.5°	68.6	75.0	78.2	80.3	81.4
80°	53.6	57.8	60.0	61.1	58.9
82.5°	39.6	42.8	43.9	43.9	40.7
85°	24.6	27.9	30.0	28.9	24.6
87.5°	11.8	16.1	17.1	15.0	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)