

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: P1175375

Luminaire Tested: S125RDR-S610D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175375  
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-S610D835-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**

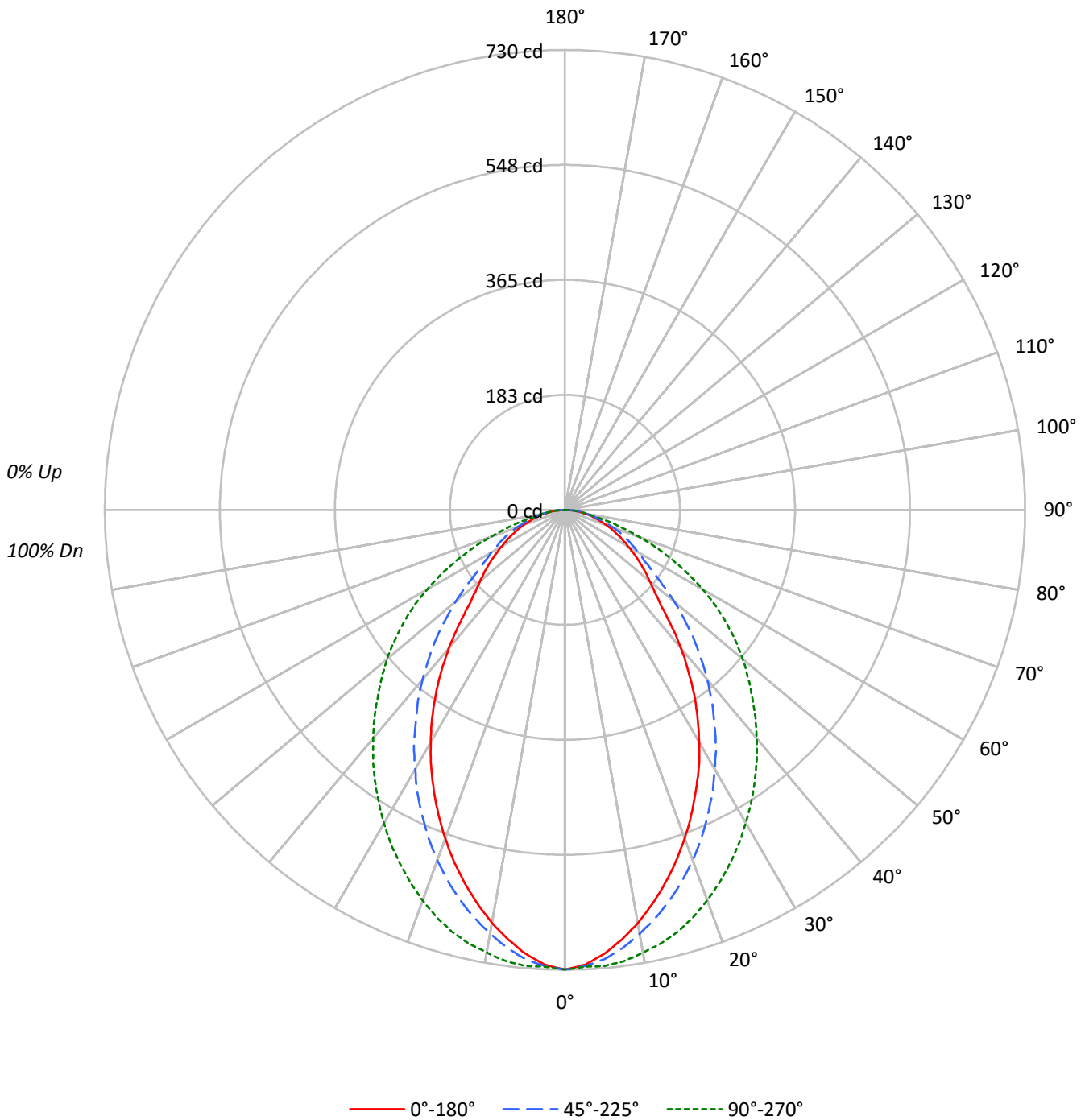
Lumens per Lamp: N/A  
Luminaire Lumens: 1374.6 lumens  
Efficiency: N/A  
Efficacy: 70.1 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 19.6  
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°	5024	5024	5024
5°	4893	4949	5022
10°	4656	4777	4989
15°	4375	4574	4941
20°	4067	4338	4834
25°	3736	4066	4706
30°	3388	3777	4565
35°	2999	3472	4415
40°	2572	3157	4253
45°	2111	2810	4090
50°	1878	2415	3947
55°	1732	2023	3748
60°	1595	1842	3472
65°	1484	1735	3068
70°	1385	1621	2506
75°	1301	1500	1878
80°	1229	1376	1352
85°	1122	1367	1122

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4090 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.6	4.9
10°-20°	182.1	13.2
20°-30°	250.5	18.2
30°-40°	265.7	19.3
40°-50°	232.5	16.9
50°-60°	178.4	13.0
60°-70°	118.9	8.6
70°-80°	60.9	4.4
80°-90°	18.1	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°	500.1	36.4
0°-40°	765.8	55.7
0°-60°	1176.7	85.6
0°-90°	1374.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1374.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	708	717	716	721	727	66
15°	614	628	642	672	693	172
25°	492	508	535	580	619	226
35°	357	374	413	474	525	222
45°	217	235	289	360	420	171
55°	144	147	168	250	312	129
65°	91	92	106	140	188	91
75°	49	52	56	60	71	52
85°	14	16	17	17	14	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	729.7	729.7	729.7	729.7	729.7
2.5°	722.8	730.3	724.7	725.3	725.9
5°	708.0	717.3	716.0	721.0	726.6
7.5°	688.2	698.1	701.2	713.6	722.2
10°	665.9	677.0	683.2	701.8	713.6
12.5°	640.5	653.5	663.4	687.5	704.9
15°	613.8	628.1	641.7	672.1	693.1
17.5°	585.3	599.6	617.5	652.2	677.6
20°	555.0	570.5	592.1	629.3	659.7
22.5°	524.0	540.1	564.9	605.8	640.5
25°	491.8	508.5	535.2	580.4	619.4
27.5°	460.2	475.7	506.7	555.0	597.7
30°	426.1	442.3	475.1	528.3	574.2
32.5°	392.1	408.2	446.0	501.7	550.0
35°	356.8	373.5	413.1	473.8	525.3
37.5°	321.5	338.8	382.8	445.3	499.9
40°	286.2	304.7	351.2	416.9	473.2
42.5°	250.2	270.1	319.0	389.0	447.2
45°	216.8	234.8	288.6	360.5	420.0
47.5°	192.6	203.2	256.4	331.4	393.9
50°	175.3	180.2	225.5	303.5	368.5
52.5°	159.8	162.9	195.1	277.5	340.7
55°	144.3	147.4	168.5	250.2	312.2
57.5°	129.5	131.3	148.7	223.0	283.7
60°	115.8	117.1	133.8	195.7	252.1
62.5°	103.4	104.1	119.5	167.9	220.5
65°	91.1	91.7	106.5	140.0	188.3
67.5°	79.9	79.9	94.1	114.6	157.3
70°	68.8	68.8	80.5	92.9	124.5
72.5°	58.8	60.1	68.1	74.9	97.2
75°	48.9	52.0	56.4	59.5	70.6
77.5°	39.6	43.4	45.2	46.5	47.1
80°	31.0	33.4	34.7	35.3	34.1
82.5°	22.9	24.8	25.4	25.4	23.5
85°	14.2	16.1	17.3	16.7	14.2
87.5°	6.8	9.3	9.9	8.7	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)