

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: P1175376

Luminaire Tested: S125RDR-S610D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175376  
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-S610D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

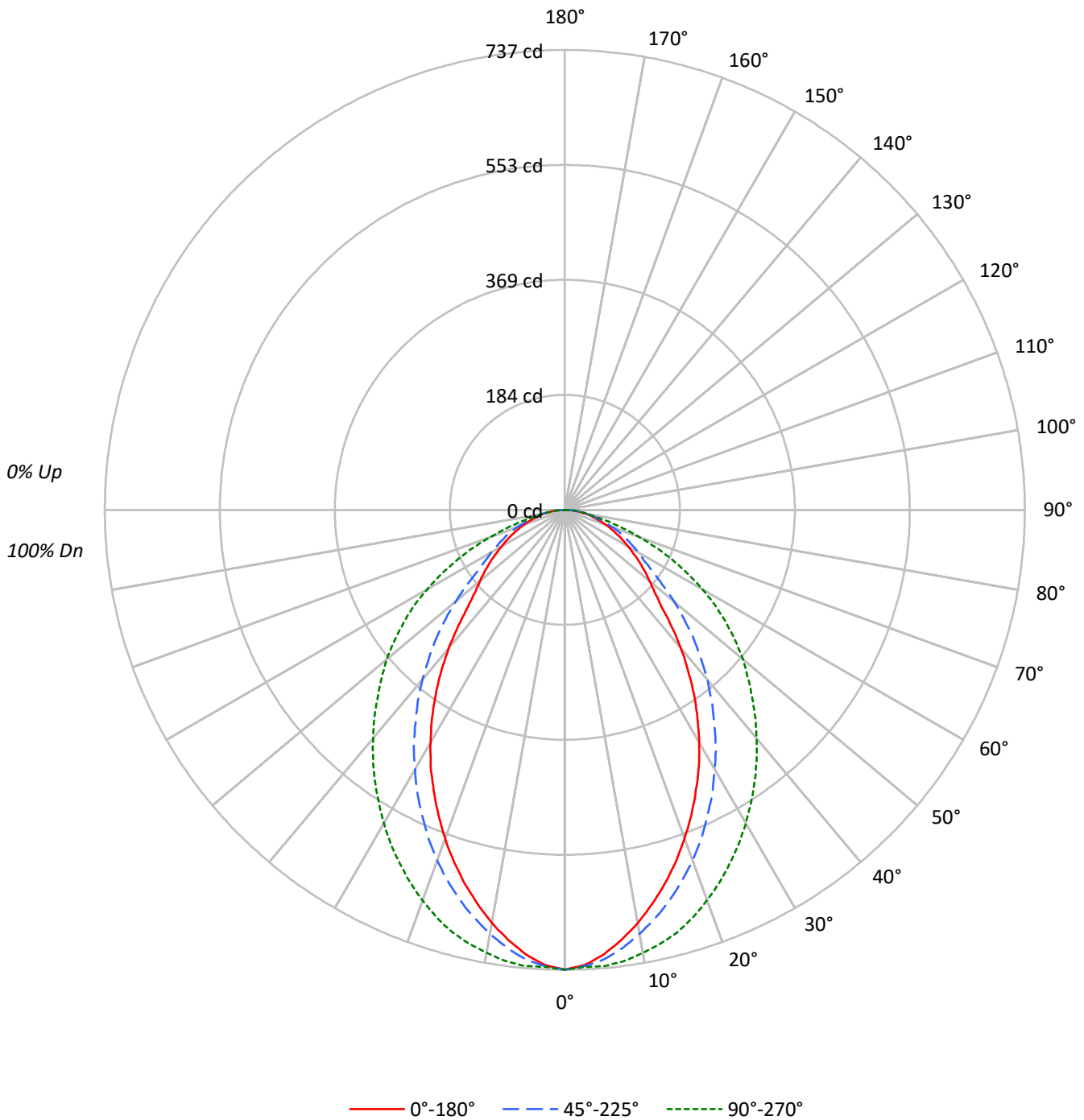
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1388.2 lumens  
Efficiency: N/A  
Efficacy: 70.8 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	
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°	5074	5074	5074
5°	4942	4998	5071
10°	4701	4823	5038
15°	4419	4619	4989
20°	4107	4382	4881
25°	3773	4105	4752
30°	3422	3815	4610
35°	3028	3507	4458
40°	2598	3188	4295
45°	2131	2838	4130
50°	1896	2439	3987
55°	1749	2042	3785
60°	1611	1860	3506
65°	1499	1753	3099
70°	1397	1637	2530
75°	1314	1514	1897
80°	1241	1388	1364
85°	1138	1382	1138

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4130 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.2	4.9
10°-20°	183.9	13.2
20°-30°	253.0	18.2
30°-40°	268.3	19.3
40°-50°	234.8	16.9
50°-60°	180.2	13.0
60°-70°	120.0	8.6
70°-80°	61.5	4.4
80°-90°	18.3	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°	505.0	36.4
0°-40°	773.3	55.7
0°-60°	1188.3	85.6
0°-90°	1388.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1388.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	715	724	723	728	734	67
15°	620	634	648	679	700	174
25°	497	514	540	586	626	228
35°	360	377	417	478	530	224
45°	219	237	292	364	424	173
55°	146	149	170	253	315	131
65°	92	93	108	141	190	92
75°	49	52	57	60	71	53
85°	14	16	18	17	14	16
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	736.9	736.9	736.9	736.9	736.9
2.5°	730.0	737.5	731.8	732.5	733.1
5°	715.0	724.3	723.1	728.1	733.7
7.5°	694.9	705.0	708.1	720.6	729.3
10°	672.4	683.7	689.9	708.7	720.6
12.5°	646.8	659.9	669.9	694.3	711.8
15°	619.9	634.3	648.0	678.7	699.9
17.5°	591.1	605.5	623.6	658.7	684.3
20°	560.5	576.1	598.0	635.5	666.2
22.5°	529.2	545.4	570.5	611.8	646.8
25°	496.7	513.5	540.4	586.1	625.5
27.5°	464.8	480.4	511.7	560.5	603.6
30°	430.4	446.6	479.8	533.6	579.8
32.5°	395.9	412.2	450.4	506.7	555.5
35°	360.3	377.2	417.2	478.5	530.4
37.5°	324.6	342.2	386.6	449.7	504.8
40°	289.0	307.8	354.7	421.0	477.9
42.5°	252.7	272.7	322.1	392.8	451.6
45°	218.9	237.1	291.5	364.0	424.1
47.5°	194.5	205.2	259.0	334.6	397.8
50°	177.0	182.0	227.7	306.5	372.2
52.5°	161.4	164.5	197.0	280.2	344.0
55°	145.7	148.9	170.1	252.7	315.3
57.5°	130.7	132.6	150.1	225.2	286.5
60°	117.0	118.2	135.1	197.7	254.6
62.5°	104.5	105.1	120.7	169.5	222.7
65°	92.0	92.6	107.6	141.4	190.2
67.5°	80.7	80.7	95.1	115.7	158.9
70°	69.4	69.4	81.3	93.8	125.7
72.5°	59.4	60.7	68.8	75.7	98.2
75°	49.4	52.5	56.9	60.0	71.3
77.5°	40.0	43.8	45.7	46.9	47.5
80°	31.3	33.8	35.0	35.7	34.4
82.5°	23.1	25.0	25.6	25.6	23.8
85°	14.4	16.3	17.5	16.9	14.4
87.5°	6.9	9.4	10.0	8.8	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)