

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: P1056467

Luminaire Tested: S125R3DR-S850D830-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1056467  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/25/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125R3DR-S850D830-X4F0-XX-UDD-FLL-S  
Description: DEFINE 5, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

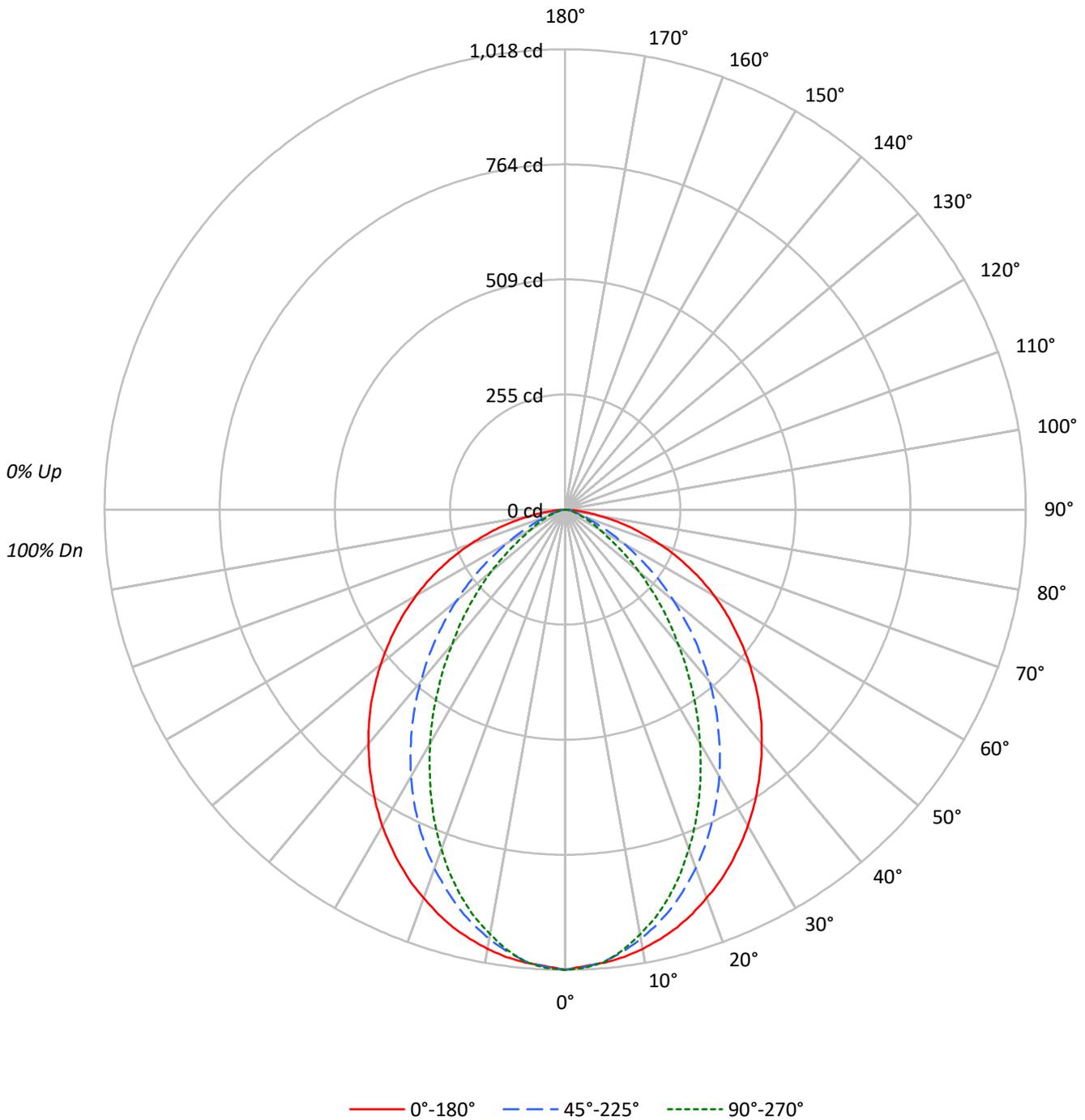
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1839.9 lumens  
Efficiency: N/A  
Efficacy: 69.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11  
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
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	111	107	103	100	108	105	102	99	101	98	96		97	95	93		93	92	90	88
2	102	96	90	85	100	94	89	84	90	86	82		87	84	80		84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	62		71	66	62		69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49		60	54	49		58	53	49	47
7	71	58	50	45	69	58	50	45	56	49	44		55	49	44		54	48	44	42
8	66	54	46	41	65	53	46	41	52	45	40		51	45	40		50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37		47	41	37		46	41	36	35
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43	38	34	32

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

	0°	45°	90°
0°	7196	7196	7196
5°	7137	7117	7130
10°	7084	6921	6847
15°	7002	6670	6491
20°	6878	6353	6013
25°	6749	5977	5470
30°	6594	5563	4870
35°	6418	5092	4238
40°	6237	4575	3583
45°	6060	4033	2968
50°	5847	3431	2333
55°	5623	2788	1696
60°	5370	2078	1213
65°	5045	1372	947
70°	4560	955	661
75°	3966	617	516
80°	3106	460	423
85°	1606	381	308

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6060 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	5.2
10°-20°	257.8	14.0
20°-30°	356.4	19.4
30°-40°	377.6	20.5
40°-50°	329.6	17.9
50°-60°	234.4	12.7
60°-70°	130.4	7.1
70°-80°	50.1	2.7
80°-90°	8.7	0.5
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°	709.0	38.5
0°-40°	1086.6	59.1
0°-60°	1650.7	89.7
0°-90°	1839.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1839.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1006	1013	1003	1000	1005	95
15°	957	948	911	892	887	269
25°	865	836	766	719	701	398
35°	744	693	590	518	491	465
45°	606	534	403	322	297	467
55°	456	366	226	156	138	408
65°	302	198	82	60	57	298
75°	145	57	23	19	19	154
85°	20	6	5	4	4	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1017.9	1017.9	1017.9	1017.9	1017.9
2.5°	1010.4	1020.8	1012.3	1013.2	1014.2
5°	1005.7	1013.2	1002.9	1000.0	1004.7
7.5°	998.2	1003.8	985.9	979.3	982.1
10°	986.8	988.7	964.2	954.8	953.9
12.5°	972.7	969.9	939.7	924.6	923.7
15°	956.7	948.2	911.4	891.6	886.9
17.5°	936.9	923.7	878.4	853.0	845.5
20°	914.3	896.4	844.5	811.5	799.3
22.5°	891.6	867.1	806.8	765.3	752.1
25°	865.3	836.0	766.3	719.2	701.3
27.5°	837.0	802.1	724.8	670.1	648.5
30°	807.8	767.2	681.5	620.2	596.6
32.5°	776.7	730.5	636.2	569.3	544.8
35°	743.7	692.8	590.0	518.4	491.1
37.5°	710.7	654.1	544.8	468.4	440.2
40°	675.8	614.5	495.8	417.5	388.3
42.5°	641.9	574.0	449.6	369.5	343.1
45°	606.1	533.5	403.4	322.3	296.9
47.5°	569.3	491.1	357.2	278.0	252.6
50°	531.6	449.6	312.0	234.7	212.1
52.5°	493.9	408.1	269.6	193.2	173.4
55°	456.2	365.7	226.2	156.5	137.6
57.5°	418.5	324.2	185.7	122.5	105.6
60°	379.8	281.8	147.0	90.5	85.8
62.5°	341.2	240.3	114.0	74.5	70.7
65°	301.6	197.9	82.0	60.3	56.6
67.5°	262.0	159.3	59.4	46.2	43.4
70°	220.6	121.6	46.2	34.9	32.0
72.5°	181.0	87.7	33.0	25.4	24.5
75°	145.2	56.6	22.6	18.9	18.9
77.5°	109.3	33.9	16.0	14.1	14.1
80°	76.3	19.8	11.3	10.4	10.4
82.5°	46.2	10.4	7.5	6.6	6.6
85°	19.8	5.7	4.7	3.8	3.8
87.5°	3.8	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)