

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: P1058056

Luminaire Tested: S122RDR-S675D840-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S675D840-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

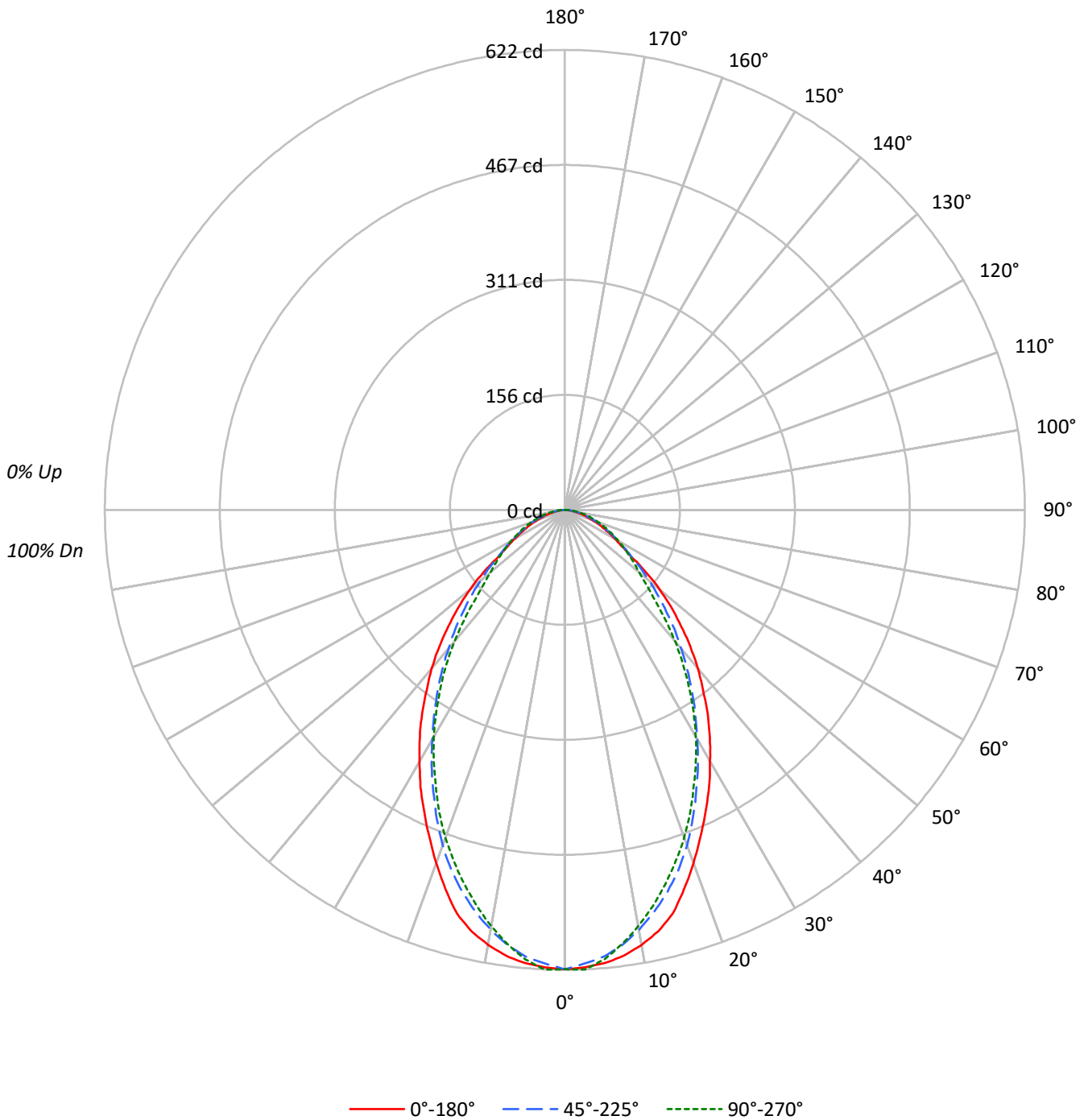
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 943.6 lumens  
Efficiency: N/A  
Efficacy: 36.6 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				34

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

	0°	45°	90°
0°	11465	11465	11465
5°	11397	11232	11306
10°	11195	10808	10714
15°	10792	10224	10016
20°	9985	9481	9267
25°	9164	8559	8399
30°	8367	7630	7547
35°	7578	6753	6596
40°	6745	5887	5576
45°	5809	5060	4465
50°	4800	4260	3749
55°	3468	3532	3375
60°	2886	3030	3067
65°	2463	2633	2807
70°	2029	2347	2563
75°	1690	1975	2324
80°	1265	1573	2104
85°	423	847	1884

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5809 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.4	6.1
10°-20°	151.2	16.0
20°-30°	195.7	20.7
30°-40°	192.0	20.3
40°-50°	151.2	16.0
50°-60°	99.1	10.5
60°-70°	60.3	6.4
70°-80°	30.2	3.2
80°-90°	6.5	0.7
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°	404.4	42.9
0°-40°	596.4	63.2
0°-60°	846.6	89.7
0°-90°	943.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	943.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	621	621	621	621	621	
5°	615	615	606	610	610	58
15°	565	557	535	528	524	157
25°	450	435	420	418	412	207
35°	336	318	300	299	293	210
45°	223	209	194	180	171	172
55°	108	114	110	106	105	102
65°	56	57	60	63	64	56
75°	24	25	28	32	33	25
85°	2	3	4	7	9	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	621.3	621.3	621.3	621.3	621.3
2.5°	619.3	620.3	614.3	620.3	622.3
5°	615.3	615.3	606.4	610.4	610.4
7.5°	608.4	607.4	593.6	593.6	592.6
10°	597.5	593.6	576.8	573.8	571.8
12.5°	583.7	576.8	557.0	552.0	549.1
15°	564.9	557.0	535.2	528.3	524.3
17.5°	537.2	529.3	510.5	502.6	498.6
20°	508.5	496.6	482.8	475.8	471.9
22.5°	478.8	465.0	452.1	447.2	443.2
25°	450.1	435.3	420.4	418.5	412.5
27.5°	422.4	404.6	389.8	388.8	383.8
30°	392.7	374.0	358.1	359.1	354.2
32.5°	365.0	347.2	328.4	329.4	323.5
35°	336.4	317.6	299.8	298.8	292.8
37.5°	306.7	288.9	272.1	268.1	262.2
40°	280.0	262.2	244.4	237.4	231.5
42.5°	251.3	235.5	219.6	208.7	200.8
45°	222.6	208.7	193.9	180.1	171.1
47.5°	194.9	184.0	171.1	154.3	148.4
50°	167.2	159.3	148.4	133.6	130.6
52.5°	138.5	135.5	128.6	118.7	117.7
55°	107.8	113.8	109.8	105.9	104.9
57.5°	91.0	92.0	95.0	94.0	94.0
60°	78.2	78.2	82.1	83.1	83.1
62.5°	66.3	67.3	71.2	73.2	73.2
65°	56.4	57.4	60.3	63.3	64.3
67.5°	46.5	48.5	51.4	54.4	55.4
70°	37.6	39.6	43.5	46.5	47.5
72.5°	30.7	31.7	35.6	38.6	39.6
75°	23.7	24.7	27.7	31.7	32.6
77.5°	16.8	18.8	21.8	24.7	26.7
80°	11.9	12.9	14.8	18.8	19.8
82.5°	6.9	7.9	9.9	12.9	13.9
85°	2.0	3.0	4.0	6.9	8.9
87.5°	0.0	0.0	0.0	2.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)