

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: P1059348

Luminaire Tested: S123RDR-S775D840-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059348  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D840-X4F0-XX-UDD-BVL-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

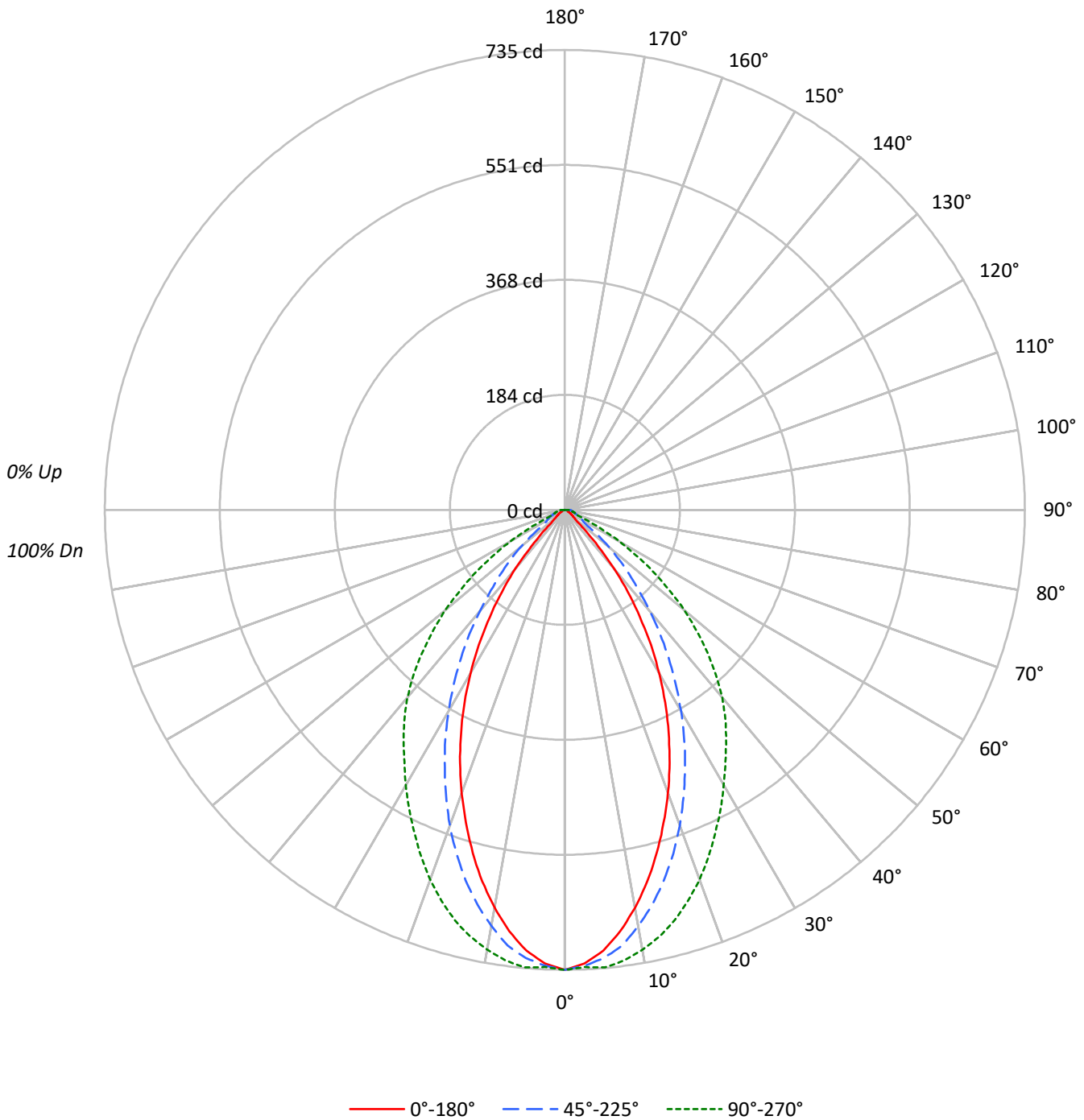
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 882.6 lumens  
Efficiency: N/A  
Efficacy: 34.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94  
Luminous Opening: Rectangular (W 0.23' 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

TEST NUMBER: P1059348

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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	86	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

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

	0°	45°	90°
0°	8632	8632	8632
5°	8335	8472	8654
10°	7694	8051	8512
15°	6905	7445	8256
20°	6023	6712	7859
25°	5081	5882	7372
30°	4087	5029	6889
35°	2992	4140	6439
40°	1865	3228	5997
45°	706	2406	5342
50°	336	1659	4552
55°	258	909	3519
60°	181	770	2313
65°	133	670	967
70°	134	632	632
75°	177	658	658
80°	264	784	717
85°	525	1307	1037

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5342 cd/sqm



TEST NUMBER: P1059348

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.5	7.6
10°-20°	173.0	19.6
20°-30°	214.2	24.3
30°-40°	192.0	21.8
40°-50°	125.9	14.3
50°-60°	63.0	7.1
60°-70°	24.6	2.8
70°-80°	13.9	1.6
80°-90°	8.5	1.0
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°	454.7	51.5
0°-40°	646.7	73.3
0°-60°	835.6	94.7
0°-90°	882.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	882.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	735	735	735	735	735	
5°	707	719	719	726	734	66
15°	568	591	612	653	679	158
25°	392	416	454	519	569	179
35°	209	237	289	376	449	130
45°	42	69	145	248	322	40
55°	13	16	44	122	172	12
65°	5	14	24	32	35	5
75°	4	14	14	14	14	4
85°	4	10	10	10	8	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	735.1	735.1	735.1	735.1	735.1
2.5°	725.5	736.1	729.3	730.3	731.3
5°	707.1	718.7	718.7	726.4	734.2
7.5°	679.1	692.6	702.3	715.8	726.4
10°	645.3	661.7	675.2	699.4	713.9
12.5°	608.6	628.9	646.2	678.1	698.4
15°	568.0	591.2	612.4	653.0	679.1
17.5°	524.5	547.7	575.7	623.1	654.9
20°	482.0	505.2	537.1	590.2	628.9
22.5°	437.6	461.7	495.6	554.5	599.9
25°	392.2	416.3	454.0	518.7	569.0
27.5°	346.8	370.9	413.4	484.0	539.0
30°	301.4	325.5	370.9	446.3	508.1
32.5°	256.0	282.1	329.4	411.5	477.2
35°	208.7	236.7	288.8	375.8	449.2
37.5°	165.2	191.3	250.2	344.9	421.2
40°	121.7	149.7	210.6	314.9	391.2
42.5°	79.2	109.2	174.8	282.1	357.4
45°	42.5	68.6	144.9	248.3	321.7
47.5°	23.2	37.7	116.9	212.5	285.0
50°	18.4	21.3	90.8	181.6	249.2
52.5°	15.5	17.4	64.7	152.6	209.6
55°	12.6	15.5	44.4	121.7	171.9
57.5°	10.6	13.5	34.8	94.7	134.3
60°	7.7	11.6	32.8	69.6	98.5
62.5°	5.8	12.6	29.0	48.3	64.7
65°	4.8	14.5	24.1	31.9	34.8
67.5°	3.9	15.5	21.3	20.3	20.3
70°	3.9	14.5	18.4	17.4	18.4
72.5°	3.9	15.5	16.4	15.5	16.4
75°	3.9	14.5	14.5	14.5	14.5
77.5°	3.9	13.5	13.5	12.6	12.6
80°	3.9	11.6	11.6	11.6	10.6
82.5°	3.9	10.6	10.6	10.6	8.7
85°	3.9	9.7	9.7	9.7	7.7
87.5°	2.9	8.7	9.7	8.7	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)