

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: P1059338

Luminaire Tested: S123RDR-S775D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059338  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S775D835-X4F0-XX-UDD-BVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

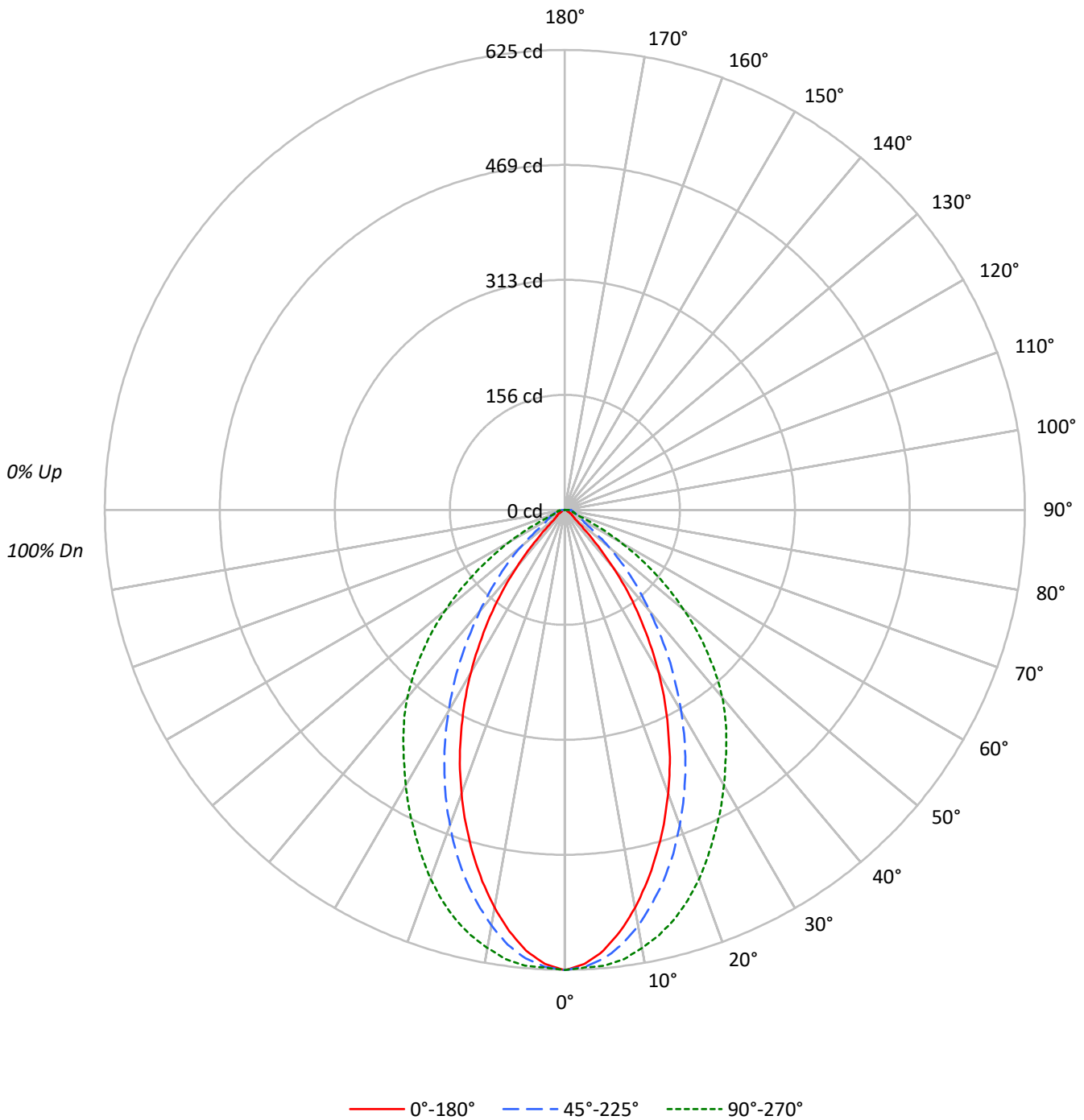
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 751.2 lumens  
Efficiency: N/A  
Efficacy: 29.1 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

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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	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	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	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
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	41	40

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

	0°	45°	90°
0°	7344	7344	7344
5°	7090	7214	7327
10°	6545	6842	7207
15°	5870	6324	6999
20°	5126	5699	6668
25°	4312	5018	6257
30°	3462	4279	5860
35°	2536	3524	5483
40°	1568	2741	5101
45°	603	2064	4542
50°	298	1416	3844
55°	235	784	3016
60°	157	651	2022
65°	133	583	903
70°	130	525	525
75°	172	563	522
80°	257	710	582
85°	391	1159	768

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4542 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.3	7.6
10°-20°	146.8	19.5
20°-30°	182.2	24.3
30°-40°	163.2	21.7
40°-50°	107.3	14.3
50°-60°	53.8	7.2
60°-70°	21.2	2.8
70°-80°	11.9	1.6
80°-90°	7.5	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°	386.3	51.4
0°-40°	549.6	73.2
0°-60°	710.7	94.6
0°-90°	751.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	751.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	625	625	625	625	625	
5°	602	611	612	616	622	56
15°	483	498	520	556	576	135
25°	333	354	387	442	483	152
35°	177	201	246	321	382	110
45°	36	60	124	209	274	34
55°	12	13	38	103	147	10
65°	5	13	21	27	32	5
75°	4	12	12	12	12	4
85°	3	9	9	9	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	625.4	625.4	625.4	625.4	625.4
2.5°	617.8	626.4	621.6	621.6	622.5
5°	601.5	611.1	612.0	615.8	621.6
7.5°	577.6	590.0	595.8	607.2	615.8
10°	548.9	562.3	573.8	593.9	604.4
12.5°	517.3	530.7	548.0	575.7	591.9
15°	482.9	498.2	520.2	555.6	575.7
17.5°	447.5	462.8	489.6	529.8	555.6
20°	410.2	427.5	456.1	502.0	533.6
22.5°	373.0	392.1	422.7	472.4	508.7
25°	332.8	353.8	387.3	441.8	482.9
27.5°	294.5	316.5	351.9	411.2	458.1
30°	255.3	277.3	315.6	379.6	432.2
32.5°	215.2	240.0	280.2	350.0	406.4
35°	176.9	200.8	245.8	321.3	382.5
37.5°	139.6	163.5	210.4	293.6	358.6
40°	102.3	127.2	178.8	266.8	332.8
42.5°	66.9	92.8	151.1	240.0	304.1
45°	36.3	60.2	124.3	209.4	273.5
47.5°	20.1	32.5	100.4	180.7	243.9
50°	16.3	18.2	77.5	154.0	210.4
52.5°	13.4	15.3	55.5	128.1	179.8
55°	11.5	13.4	38.3	103.3	147.3
57.5°	9.6	11.5	30.6	79.4	115.7
60°	6.7	11.5	27.7	58.3	86.1
62.5°	5.7	11.5	23.9	40.2	57.4
65°	4.8	13.4	21.0	26.8	32.5
67.5°	3.8	13.4	18.2	17.2	17.2
70°	3.8	13.4	15.3	14.3	15.3
72.5°	3.8	14.3	14.3	13.4	13.4
75°	3.8	12.4	12.4	11.5	11.5
77.5°	3.8	11.5	11.5	10.5	10.5
80°	3.8	10.5	10.5	9.6	8.6
82.5°	3.8	9.6	9.6	8.6	7.7
85°	2.9	8.6	8.6	8.6	5.7
87.5°	2.9	7.7	8.6	7.7	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)