

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: P1059392

Luminaire Tested: S123RDR-S775D940-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059392
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-S775D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

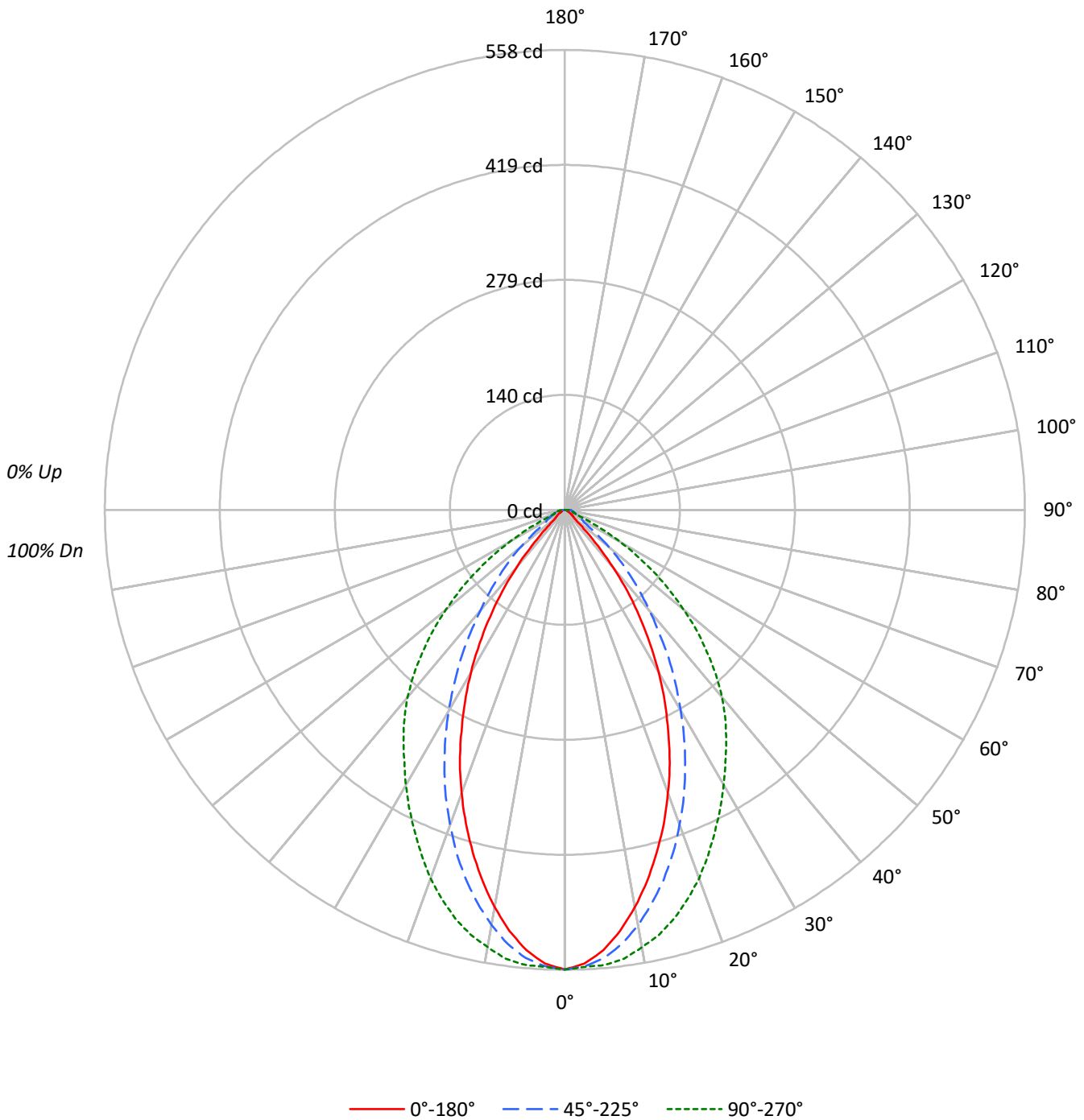
Lumens per Lamp: N/A
Luminaire Lumens: 669.9 lumens
Efficiency: N/A
Efficacy: 26.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	6549	6549	6549
5°	6323	6432	6534
10°	5837	6100	6426
15°	5235	5639	6240
20°	4571	5083	5946
25°	3844	4475	5579
30°	3087	3816	5226
35°	2262	3142	4890
40°	1398	2445	4548
45°	538	1842	4050
50°	265	1262	3427
55°	209	698	2688
60°	141	580	1801
65°	119	522	806
70°	117	467	467
75°	154	504	463
80°	230	636	521
85°	350	1037	687

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4050 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.1	7.6
10°-20°	130.9	19.5
20°-30°	162.5	24.3
30°-40°	145.6	21.7
40°-50°	95.7	14.3
50°-60°	47.9	7.2
60°-70°	18.9	2.8
70°-80°	10.6	1.6
80°-90°	6.7	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°	344.5	51.4
0°-40°	490.1	73.2
0°-60°	633.7	94.6
0°-90°	669.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	669.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	558	558	558	558	558	
5°	536	545	546	549	554	50
15°	431	444	464	495	513	120
25°	297	316	345	394	431	136
35°	158	179	219	286	341	98
45°	32	54	111	187	244	31
55°	10	12	34	92	131	9
65°	4	12	19	24	29	4
75°	3	11	11	10	10	4
85°	3	8	8	8	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	557.7	557.7	557.7	557.7	557.7
2.5°	550.9	558.5	554.3	554.3	555.1
5°	536.4	544.9	545.7	549.2	554.3
7.5°	515.0	526.1	531.2	541.5	549.2
10°	489.5	501.4	511.6	529.5	538.9
12.5°	461.3	473.3	488.6	513.3	527.8
15°	430.6	444.3	463.9	495.4	513.3
17.5°	399.1	412.7	436.6	472.4	495.4
20°	365.8	381.2	406.8	447.7	475.8
22.5°	332.6	349.6	376.9	421.2	453.7
25°	296.7	315.5	345.4	394.0	430.6
27.5°	262.6	282.3	313.8	366.7	408.5
30°	227.7	247.3	281.4	338.5	385.4
32.5°	191.9	214.0	249.8	312.1	362.4
35°	157.8	179.1	219.2	286.5	341.1
37.5°	124.5	145.8	187.6	261.8	319.8
40°	91.2	113.4	159.5	237.9	296.7
42.5°	59.7	82.7	134.7	214.0	271.2
45°	32.4	53.7	110.9	186.7	243.9
47.5°	17.9	29.0	89.5	161.2	217.4
50°	14.5	16.2	69.1	137.3	187.6
52.5°	11.9	13.6	49.5	114.3	160.3
55°	10.2	11.9	34.1	92.1	131.3
57.5°	8.5	10.2	27.3	70.8	103.2
60°	6.0	10.2	24.7	52.0	76.7
62.5°	5.1	10.2	21.3	35.8	51.2
65°	4.3	11.9	18.8	23.9	29.0
67.5°	3.4	11.9	16.2	15.3	15.3
70°	3.4	11.9	13.6	12.8	13.6
72.5°	3.4	12.8	12.8	11.9	11.9
75°	3.4	11.1	11.1	10.2	10.2
77.5°	3.4	10.2	10.2	9.4	9.4
80°	3.4	9.4	9.4	8.5	7.7
82.5°	3.4	8.5	8.5	7.7	6.8
85°	2.6	7.7	7.7	7.7	5.1
87.5°	2.6	6.8	7.7	6.8	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)