

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059398

Luminaire Tested: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059398  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67 )  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

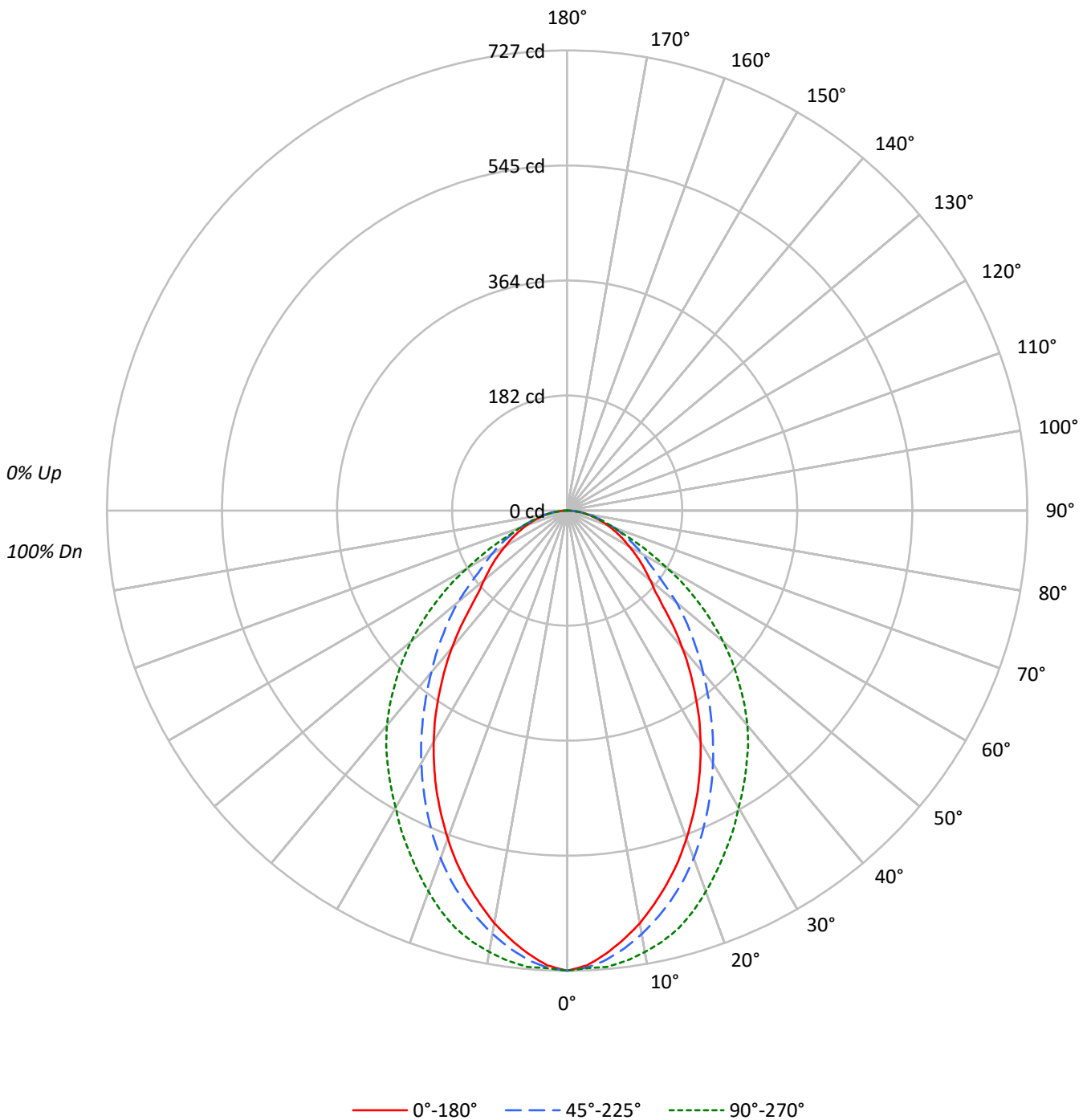
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1313.0 lumens  
Efficiency: N/A  
Efficacy: 50.9 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1  
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 (A<sub>in</sub>): 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: P1059398

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1059398

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S

**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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	45	39	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

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

	0°	45°	90°
0°	8536	8536	8536
5°	8286	8397	8528
10°	7895	8098	8443
15°	7417	7739	8298
20°	6889	7305	8007
25°	6327	6790	7673
30°	5719	6251	7349
35°	5044	5681	7073
40°	4336	5120	6792
45°	3565	4613	6369
50°	3129	4110	5870
55°	2897	3507	5198
60°	2661	3222	4302
65°	2487	2959	3387
70°	2341	2692	2692
75°	2205	2473	2318
80°	2076	2245	1961
85°	1954	2183	1495

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6369 cd/sqm



TEST NUMBER: P1059398

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.2	5.1
10°-20°	180.2	13.7
20°-30°	244.3	18.6
30°-40°	255.4	19.5
40°-50°	221.5	16.9
50°-60°	164.8	12.6
60°-70°	105.7	8.1
70°-80°	56.7	4.3
80°-90°	17.1	1.3
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°	491.7	37.4
0°-40°	747.1	56.9
0°-60°	1133.4	86.3
0°-90°	1313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1313.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	703	715	712	718	724	66
15°	610	625	637	662	683	171
25°	488	504	524	559	592	224
35°	352	369	396	446	493	220
45°	215	231	278	338	384	169
55°	142	145	171	220	254	127
65°	90	97	106	113	122	89
75°	49	56	54	52	51	51
85°	14	18	16	14	11	16
90°	0	0	0	0	0	



TEST NUMBER: P1059398

CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	726.9	726.9	726.9	726.9	726.9
2.5°	719.2	729.4	722.6	722.6	723.5
5°	703.0	715.0	712.4	717.5	723.5
7.5°	683.4	696.2	697.1	709.0	717.5
10°	662.1	674.9	679.2	696.2	708.1
12.5°	636.6	651.0	658.7	680.0	697.1
15°	610.1	624.6	636.6	662.1	682.6
17.5°	582.0	596.5	611.8	640.8	663.0
20°	551.3	566.7	584.6	613.6	640.8
22.5°	519.8	536.0	554.8	586.3	617.0
25°	488.3	503.6	524.1	559.0	592.2
27.5°	455.1	471.2	492.5	530.9	568.4
30°	421.8	438.0	461.0	501.9	542.0
32.5°	387.7	403.9	428.6	474.7	518.1
35°	351.9	369.0	396.3	446.5	493.4
37.5°	317.9	334.0	364.7	420.1	469.5
40°	282.9	300.0	334.0	393.7	443.1
42.5°	248.8	265.9	305.9	365.6	414.1
45°	214.7	230.9	277.8	337.5	383.5
47.5°	188.3	200.3	251.4	307.6	353.6
50°	171.3	175.5	225.0	278.7	321.3
52.5°	155.9	159.4	196.0	249.7	288.0
55°	141.5	144.9	171.3	219.9	253.9
57.5°	127.0	131.2	152.5	189.2	219.9
60°	113.3	118.4	137.2	161.9	183.2
62.5°	101.4	107.4	121.9	137.2	151.7
65°	89.5	97.1	106.5	113.3	121.9
67.5°	78.4	86.9	92.0	93.7	94.6
70°	68.2	76.7	78.4	78.4	78.4
72.5°	57.9	67.3	65.6	64.8	63.9
75°	48.6	56.2	54.5	52.0	51.1
77.5°	39.2	46.0	43.5	41.8	39.2
80°	30.7	35.8	33.2	31.5	29.0
82.5°	23.0	26.4	23.9	22.2	19.6
85°	14.5	17.9	16.2	13.6	11.1
87.5°	7.7	10.2	8.5	7.7	4.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059398  
 CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-WVL-S

**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.23	15.72	14.60	16.03	16.34	16.99	18.48	17.36	18.79	19.10
	3H	15.95	17.27	16.32	17.60	17.96	18.01	19.34	18.39	19.67	20.03
	4H	16.61	17.85	17.01	18.20	18.58	18.38	19.62	18.78	19.97	20.35
	6H	17.11	18.26	17.52	18.62	19.02	18.63	19.78	19.05	20.15	20.54
	8H	17.29	18.38	17.71	18.77	19.17	18.70	19.80	19.13	20.19	20.59
	12H	17.41	18.46	17.84	18.84	19.27	18.74	19.79	19.17	20.17	20.60
4H	2H	15.01	16.26	15.41	16.60	16.98	17.26	18.51	17.66	18.86	19.24
	3H	16.94	17.97	17.35	18.37	18.77	18.52	19.55	18.93	19.95	20.35
	4H	17.75	18.68	18.18	19.09	19.53	19.00	19.93	19.44	20.35	20.79
	6H	18.39	19.19	18.84	19.64	20.10	19.39	20.19	19.84	20.64	21.10
	8H	18.61	19.37	19.08	19.81	20.28	19.50	20.25	19.96	20.70	21.17
	12H	18.79	19.46	19.27	19.94	20.41	19.57	20.24	20.05	20.72	21.19
8H	4H	18.07	18.82	18.53	19.27	19.73	19.20	19.95	19.66	20.40	20.86
	6H	18.86	19.48	19.36	19.97	20.45	19.68	20.31	20.18	20.80	21.28
	8H	19.19	19.75	19.70	20.26	20.75	19.86	20.42	20.38	20.93	21.42
	12H	19.46	19.96	19.97	20.45	21.02	19.99	20.49	20.50	20.98	21.55
12H	4H	18.09	18.76	18.57	19.24	19.71	19.21	19.88	19.69	20.36	20.84
	6H	18.91	19.47	19.43	19.98	20.47	19.72	20.28	20.24	20.79	21.28
	8H	19.31	19.80	19.82	20.29	20.86	19.95	20.45	20.46	20.94	21.50