

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: P1059397

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059397
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)
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-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

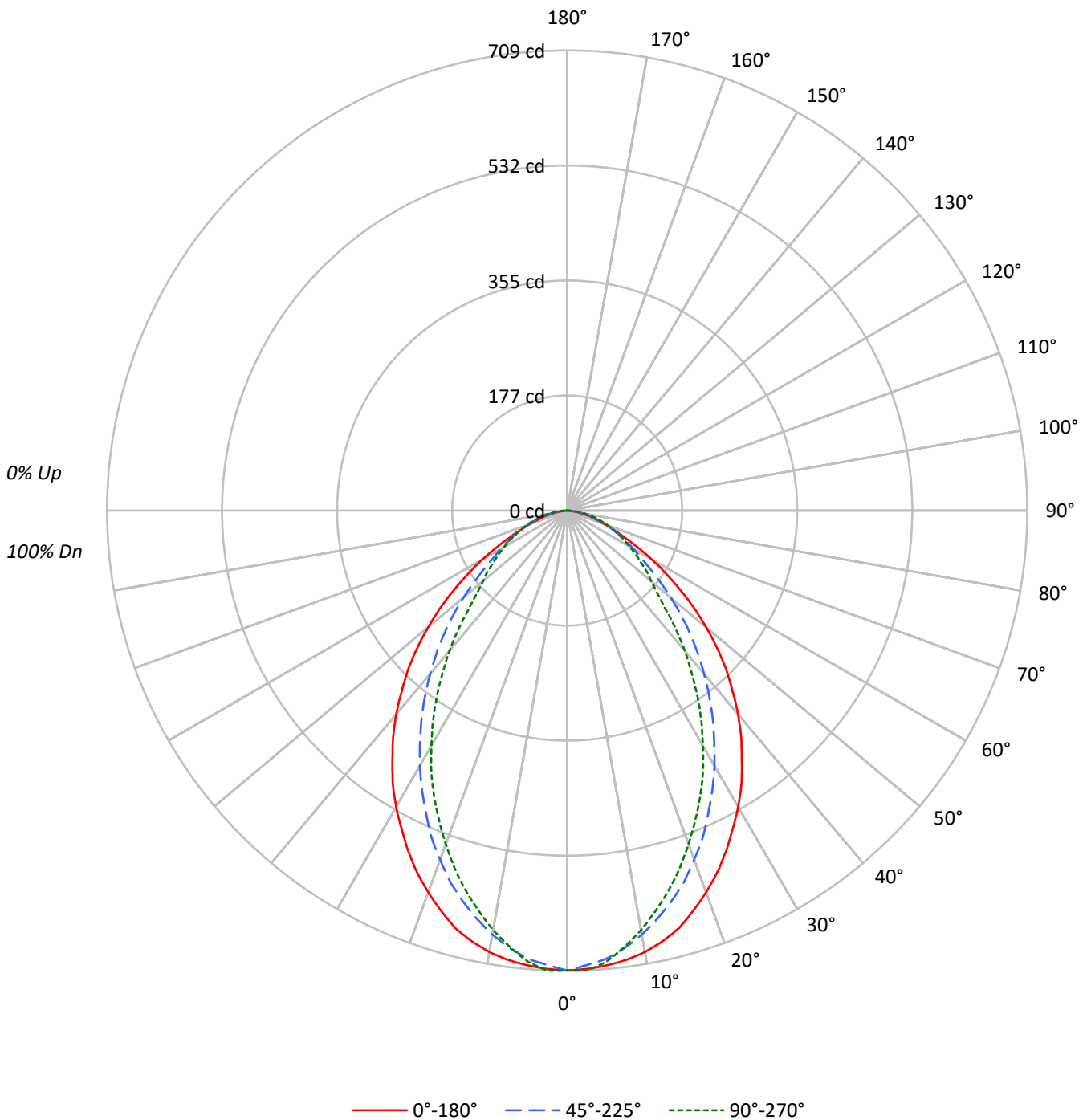
Lumens per Lamp: N/A
Luminaire Lumens: 1239.3 lumens
Efficiency: N/A
Efficacy: 48.0 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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: P1059397

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

Luminous Intensity Polar Plot





TEST NUMBER: P1059397

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

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	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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88																												
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																												
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66																												
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																												
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																												
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																												
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42																												
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																												
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35																												
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8321	8321	8321
5°	8292	8171	8222
10°	8236	7910	7829
15°	8096	7568	7361
20°	7823	7151	6833
25°	7503	6665	6289
30°	7148	6154	5670
35°	6727	5603	5017
40°	6279	5026	4321
45°	5756	4441	3550
50°	5102	3813	3080
55°	4342	3190	2825
60°	3539	2781	2621
65°	2698	2462	2437
70°	2105	2194	2280
75°	1701	1969	2123
80°	1265	1609	1961
85°	687	1037	1725

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5756 cd/sqm

TEST NUMBER: P1059397

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.8	5.3
10°-20°	177.0	14.3
20°-30°	240.6	19.4
30°-40°	249.4	20.1
40°-50°	210.3	17.0
50°-60°	149.3	12.0
60°-70°	91.2	7.4
70°-80°	45.4	3.7
80°-90°	10.3	0.8
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°	483.3	39.0
0°-40°	732.7	59.1
0°-60°	1092.3	88.1
0°-90°	1239.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1239.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	709	709	709	709	709	
5°	704	704	693	698	698	67
15°	666	653	622	612	606	187
25°	579	554	514	496	485	266
35°	469	434	391	364	350	293
45°	347	310	267	231	214	266
55°	212	190	156	142	138	190
65°	97	94	89	89	88	99
75°	38	40	43	45	47	40
85°	5	6	8	11	13	7
90°	0	0	0	0	0	



TEST NUMBER: P1059397

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.6	708.6	708.6	708.6	708.6
2.5°	706.9	707.7	700.9	708.6	709.4
5°	703.5	703.5	693.2	697.5	697.5
7.5°	698.3	696.6	679.6	679.6	677.9
10°	690.7	685.6	663.4	659.2	656.6
12.5°	679.6	671.1	643.8	636.2	631.1
15°	666.0	653.2	622.5	611.5	605.5
17.5°	646.4	633.6	599.6	584.2	577.4
20°	626.0	607.2	572.3	557.0	546.8
22.5°	603.8	580.0	545.9	527.2	516.1
25°	579.1	553.6	514.4	495.7	485.4
27.5°	552.7	524.6	484.6	463.3	453.1
30°	527.2	494.8	453.9	430.1	418.2
32.5°	499.9	463.3	421.6	396.9	384.9
35°	469.3	433.5	390.9	363.6	350.0
37.5°	440.3	403.7	359.4	330.4	315.1
40°	409.6	373.0	327.9	298.1	281.9
42.5°	377.3	342.4	298.1	263.2	247.8
45°	346.6	310.0	267.4	230.8	213.8
47.5°	313.4	279.3	237.6	200.1	188.2
50°	279.3	247.8	208.7	174.6	168.6
52.5°	246.1	219.7	179.7	157.6	155.0
55°	212.1	189.9	155.8	142.2	138.0
57.5°	180.5	164.4	133.7	126.9	125.2
60°	150.7	137.1	118.4	114.1	111.6
62.5°	121.8	114.1	103.0	101.3	99.6
65°	97.1	93.7	88.6	88.6	87.7
67.5°	76.6	76.6	75.8	77.5	76.6
70°	61.3	62.2	63.9	65.6	66.4
72.5°	48.5	51.1	52.8	55.4	56.2
75°	37.5	40.0	43.4	45.1	46.8
77.5°	27.3	29.8	33.2	35.8	37.5
80°	18.7	20.4	23.8	27.3	29.0
82.5°	11.9	12.8	15.3	18.7	20.4
85°	5.1	6.0	7.7	11.1	12.8
87.5°	0.0	0.0	0.9	3.4	6.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1059397
 CATALOG NUMBER: S123RDRP-S775D940-X4F0-XX-UDD-WVL-B

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	16.17	17.62	16.54	17.93	18.25	14.27	15.72	14.63	16.03	16.35
	3H	17.07	18.36	17.45	18.69	19.05	15.84	17.14	16.22	17.46	17.83
	4H	17.35	18.56	17.75	18.91	19.29	16.43	17.65	16.84	18.00	18.38
	6H	17.50	18.62	17.91	18.98	19.38	16.89	18.00	17.30	18.37	18.76
	8H	17.52	18.58	17.95	18.97	19.38	17.04	18.10	17.46	18.49	18.89
	12H	17.52	18.53	17.95	18.91	19.34	17.13	18.15	17.57	18.53	18.96
4H	2H	16.41	17.63	16.82	17.98	18.36	14.81	16.02	15.21	16.37	16.75
	3H	17.53	18.53	17.94	18.93	19.33	16.58	17.58	16.99	17.98	18.39
	4H	17.92	18.82	18.35	19.23	19.67	17.29	18.19	17.73	18.61	19.05
	6H	18.16	18.94	18.62	19.38	19.84	17.87	18.65	18.33	19.09	19.55
	8H	18.20	18.93	18.67	19.37	19.84	18.06	18.78	18.52	19.23	19.70
	12H	18.21	18.86	18.69	19.34	19.81	18.20	18.84	18.68	19.32	19.80
8H	4H	18.08	18.80	18.54	19.25	19.72	17.50	18.23	17.97	18.68	19.14
	6H	18.39	18.99	18.89	19.48	19.96	18.18	18.78	18.68	19.27	19.75
	8H	18.46	19.00	18.98	19.51	20.00	18.44	18.97	18.95	19.49	19.97
	12H	18.50	18.97	19.01	19.47	20.03	18.65	19.12	19.16	19.61	20.18
12H	4H	18.08	18.73	18.56	19.21	19.68	17.50	18.15	17.98	18.63	19.10
	6H	18.40	18.94	18.92	19.45	19.94	18.19	18.73	18.70	19.24	19.73
	8H	18.52	18.99	19.03	19.48	20.05	18.49	18.97	19.00	19.46	20.03