

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: P1059379

Luminaire Tested: S123RDRP-S775D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059379  
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-S775D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

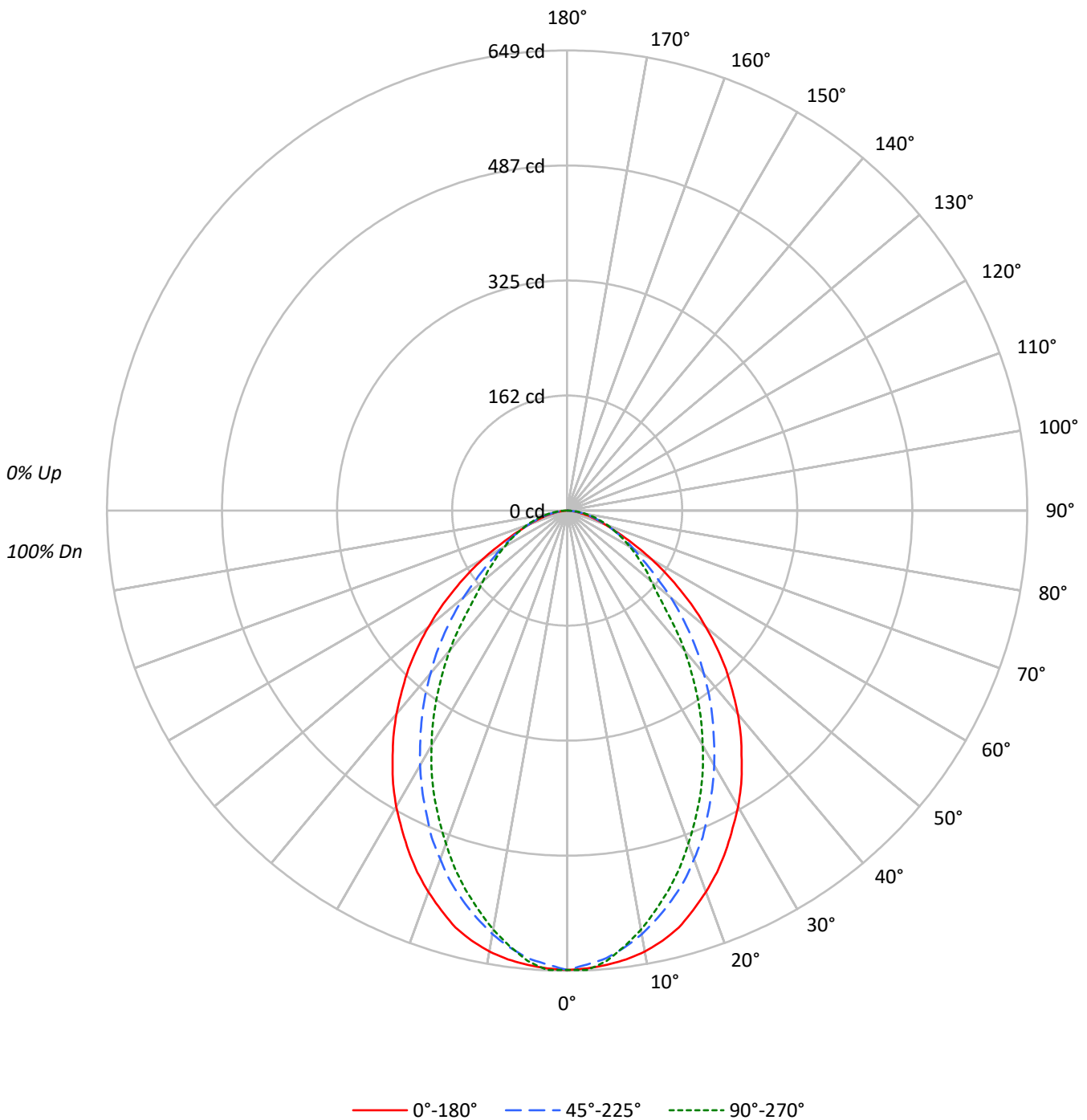
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1133.1 lumens  
Efficiency: N/A  
Efficacy: 43.9 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<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: P1059379

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-WVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1059379

CATALOG NUMBER: S123RDRP-S775D930-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	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°	7607	7607	7607
5°	7582	7471	7517
10°	7530	7233	7158
15°	7402	6920	6730
20°	7151	6539	6247
25°	6860	6093	5750
30°	6535	5627	5184
35°	6150	5123	4587
40°	5741	4596	3950
45°	5263	4060	3245
50°	4666	3486	2817
55°	3970	2917	2582
60°	3236	2541	2395
65°	2467	2251	2228
70°	1926	2005	2084
75°	1556	1801	1942
80°	1156	1474	1792
85°	633	943	1576

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5263 cd/sqm



TEST NUMBER: P1059379

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-WVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.1	5.3
10°-20°	161.8	14.3
20°-30°	220.0	19.4
30°-40°	228.0	20.1
40°-50°	192.3	17.0
50°-60°	136.5	12.0
60°-70°	83.4	7.4
70°-80°	41.5	3.7
80°-90°	9.4	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°	441.9	39.0
0°-40°	669.9	59.1
0°-60°	998.7	88.1
0°-90°	1133.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1133.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	648	648	648	648	648	
5°	643	643	634	638	638	61
15°	609	597	569	559	554	171
25°	530	506	470	453	444	243
35°	429	396	357	332	320	268
45°	317	283	244	211	195	243
55°	194	174	142	130	126	174
65°	89	86	81	81	80	91
75°	34	37	40	41	43	37
85°	5	6	7	10	12	7
90°	0	0	0	0	0	



TEST NUMBER: P1059379

CATALOG NUMBER: S123RDRP-S775D930-X4F0-XX-UDD-WVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	647.8	647.8	647.8	647.8	647.8
2.5°	646.3	647.1	640.8	647.8	648.6
5°	643.2	643.2	633.8	637.7	637.7
7.5°	638.5	636.9	621.4	621.4	619.8
10°	631.5	626.8	606.6	602.7	600.3
12.5°	621.4	613.6	588.7	581.7	577.0
15°	608.9	597.2	569.2	559.1	553.6
17.5°	591.0	579.3	548.2	534.2	527.9
20°	572.3	555.2	523.3	509.2	499.9
22.5°	552.1	530.3	499.1	482.0	471.9
25°	529.5	506.1	470.3	453.2	443.8
27.5°	505.4	479.7	443.1	423.6	414.2
30°	482.0	452.4	415.0	393.2	382.3
32.5°	457.1	423.6	385.4	362.9	352.0
35°	429.0	396.3	357.4	332.5	320.0
37.5°	402.6	369.1	328.6	302.1	288.1
40°	374.5	341.1	299.8	272.5	257.7
42.5°	344.9	313.0	272.5	240.6	226.6
45°	316.9	283.4	244.5	211.0	195.4
47.5°	286.5	255.4	217.2	183.0	172.1
50°	255.4	226.6	190.8	159.6	154.2
52.5°	225.0	200.9	164.3	144.1	141.7
55°	193.9	173.6	142.5	130.0	126.1
57.5°	165.1	150.3	122.2	116.0	114.5
60°	137.8	125.4	108.2	104.3	102.0
62.5°	111.3	104.3	94.2	92.7	91.1
65°	88.8	85.7	81.0	81.0	80.2
67.5°	70.1	70.1	69.3	70.9	70.1
70°	56.1	56.8	58.4	60.0	60.7
72.5°	44.4	46.7	48.3	50.6	51.4
75°	34.3	36.6	39.7	41.3	42.8
77.5°	24.9	27.3	30.4	32.7	34.3
80°	17.1	18.7	21.8	24.9	26.5
82.5°	10.9	11.7	14.0	17.1	18.7
85°	4.7	5.5	7.0	10.1	11.7
87.5°	0.0	0.0	0.8	3.1	5.5
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1059379

CATALOG NUMBER: S123RDRP-S775D930-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	15.86	17.31	16.23	17.62	17.94	13.95	15.41	14.32	15.72	16.03
	3H	16.76	18.05	17.14	18.38	18.74	15.53	16.82	15.91	17.15	17.52
	4H	17.04	18.25	17.44	18.60	18.98	16.12	17.34	16.53	17.69	18.07
	6H	17.19	18.31	17.60	18.67	19.07	16.58	17.69	16.99	18.06	18.45
	8H	17.21	18.27	17.64	18.66	19.07	16.73	17.79	17.15	18.18	18.58
	12H	17.21	18.22	17.64	18.60	19.03	16.82	17.84	17.26	18.22	18.65
4H	2H	16.10	17.32	16.50	17.67	18.05	14.50	15.71	14.90	16.06	16.44
	3H	17.22	18.22	17.63	18.62	19.02	16.27	17.27	16.68	17.67	18.08
	4H	17.61	18.51	18.04	18.92	19.36	16.98	17.88	17.42	18.30	18.74
	6H	17.85	18.63	18.31	19.07	19.53	17.56	18.33	18.01	18.78	19.24
	8H	17.89	18.62	18.36	19.06	19.53	17.75	18.47	18.21	18.92	19.39
	12H	17.90	18.55	18.38	19.03	19.50	17.89	18.53	18.37	19.01	19.49
8H	4H	17.77	18.49	18.23	18.94	19.41	17.19	17.92	17.66	18.37	18.83
	6H	18.08	18.68	18.58	19.17	19.65	17.87	18.47	18.37	18.96	19.44
	8H	18.15	18.69	18.67	19.20	19.69	18.13	18.66	18.64	19.17	19.66
	12H	18.19	18.66	18.70	19.16	19.72	18.33	18.81	18.85	19.30	19.87
12H	4H	17.77	18.42	18.25	18.90	19.37	17.19	17.84	17.67	18.32	18.79
	6H	18.09	18.63	18.61	19.14	19.63	17.88	18.41	18.39	18.93	19.42
	8H	18.21	18.68	18.72	19.17	19.74	18.18	18.65	18.69	19.15	19.71