

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: P1059406

Luminaire Tested: S123RDRP-S775D950-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059406
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-S775D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

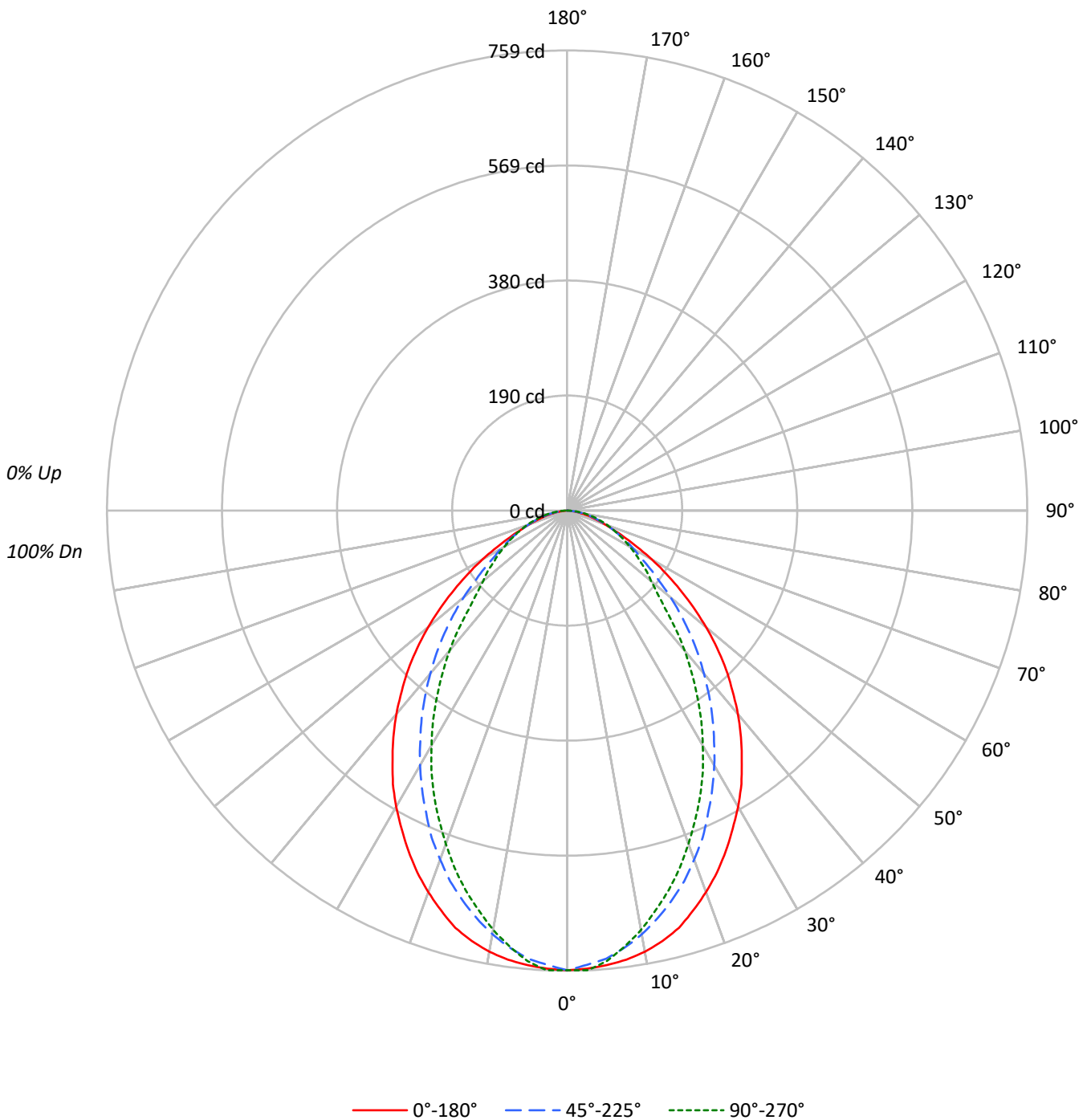
Lumens per Lamp: N/A
Luminaire Lumens: 1325.9 lumens
Efficiency: N/A
Efficacy: 51.4 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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				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°	8902	8902	8902
5°	8871	8743	8796
10°	8810	8463	8376
15°	8662	8096	7875
20°	8369	7651	7309
25°	8028	7130	6728
30°	7647	6584	6066
35°	7196	5995	5368
40°	6719	5377	4623
45°	6158	4751	3798
50°	5460	4077	3296
55°	4645	3413	3022
60°	3788	2973	2804
65°	2887	2634	2606
70°	2252	2345	2441
75°	1819	2110	2273
80°	1352	1724	2096
85°	741	1105	1846

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6158 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	5.3
10°-20°	189.3	14.3
20°-30°	257.4	19.4
30°-40°	266.8	20.1
40°-50°	225.0	17.0
50°-60°	159.7	12.0
60°-70°	97.6	7.4
70°-80°	48.6	3.7
80°-90°	11.0	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°	517.1	39.0
0°-40°	783.9	59.1
0°-60°	1168.6	88.1
0°-90°	1325.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1325.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	753	753	742	746	746	71
15°	712	699	666	654	648	200
25°	620	592	550	530	519	285
35°	502	464	418	389	374	314
45°	371	332	286	247	229	285
55°	227	203	167	152	148	204
65°	104	100	95	95	94	106
75°	40	43	46	48	50	43
85°	6	6	8	12	14	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	758.1	758.1	758.1	758.1	758.1
2.5°	756.2	757.1	749.9	758.1	759.0
5°	752.6	752.6	741.7	746.2	746.2
7.5°	747.1	745.3	727.1	727.1	725.3
10°	738.9	733.5	709.8	705.2	702.5
12.5°	727.1	718.0	688.8	680.6	675.1
15°	712.5	698.8	666.0	654.2	647.8
17.5°	691.5	677.9	641.4	625.0	617.7
20°	669.7	649.6	612.3	595.9	584.9
22.5°	646.0	620.5	584.0	564.0	552.1
25°	619.6	592.2	550.3	530.3	519.3
27.5°	591.3	561.3	518.4	495.7	484.7
30°	564.0	529.4	485.6	460.1	447.4
32.5°	534.8	495.7	451.0	424.6	411.8
35°	502.0	463.8	418.2	389.1	374.5
37.5°	471.1	431.9	384.5	353.5	337.1
40°	438.3	399.1	350.8	318.9	301.6
42.5°	403.6	366.3	318.9	281.5	265.1
45°	370.8	331.7	286.1	246.9	228.7
47.5°	335.3	298.9	254.2	214.1	201.4
50°	298.9	265.1	223.2	186.8	180.4
52.5°	263.3	235.1	192.2	168.6	165.8
55°	226.9	203.2	166.7	152.2	147.6
57.5°	193.2	175.8	143.0	135.8	133.9
60°	161.3	146.7	126.6	122.1	119.4
62.5°	130.3	122.1	110.2	108.4	106.6
65°	103.9	100.2	94.8	94.8	93.8
67.5°	82.0	82.0	81.1	82.9	82.0
70°	65.6	66.5	68.3	70.2	71.1
72.5°	51.9	54.7	56.5	59.2	60.1
75°	40.1	42.8	46.5	48.3	50.1
77.5°	29.2	31.9	35.5	38.3	40.1
80°	20.0	21.9	25.5	29.2	31.0
82.5°	12.8	13.7	16.4	20.0	21.9
85°	5.5	6.4	8.2	11.8	13.7
87.5°	0.0	0.0	0.9	3.6	6.4
90°	0.0	0.0	0.0	0.0	0.0



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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	16.40	17.85	16.77	18.17	18.48	14.50	15.95	14.87	16.27	16.58
	3H	17.30	18.60	17.68	18.92	19.29	16.08	17.37	16.45	17.70	18.06
	4H	17.58	18.80	17.98	19.15	19.53	16.67	17.88	17.07	18.23	18.61
	6H	17.73	18.85	18.15	19.22	19.61	17.12	18.24	17.54	18.61	19.00
	8H	17.76	18.82	18.18	19.21	19.61	17.27	18.33	17.70	18.72	19.13
	12H	17.75	18.77	18.18	19.15	19.58	17.37	18.39	17.80	18.77	19.20
4H	2H	16.65	17.86	17.05	18.21	18.59	15.04	16.26	15.45	16.61	16.99
	3H	17.76	18.76	18.17	19.16	19.57	16.82	17.82	17.23	18.22	18.62
	4H	18.15	19.05	18.58	19.47	19.91	17.53	18.43	17.96	18.84	19.28
	6H	18.39	19.17	18.85	19.62	20.08	18.10	18.88	18.56	19.32	19.79
	8H	18.44	19.16	18.90	19.61	20.08	18.29	19.02	18.76	19.47	19.93
	12H	18.45	19.09	18.93	19.57	20.04	18.43	19.08	18.92	19.56	20.03
8H	4H	18.31	19.04	18.77	19.48	19.95	17.74	18.47	18.20	18.91	19.38
	6H	18.62	19.22	19.12	19.71	20.19	18.42	19.01	18.91	19.51	19.99
	8H	18.70	19.24	19.22	19.75	20.24	18.67	19.21	19.19	19.72	20.21
	12H	18.73	19.21	19.25	19.70	20.27	18.88	19.35	19.39	19.85	20.42
12H	4H	18.31	18.96	18.80	19.44	19.91	17.74	18.38	18.22	18.86	19.34
	6H	18.64	19.17	19.15	19.69	20.18	18.42	18.96	18.94	19.47	19.96
	8H	18.75	19.23	19.26	19.72	20.29	18.73	19.20	19.24	19.69	20.26