

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: P1059370

Luminaire Tested: S123RDRP-S775D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059370
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-S775D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

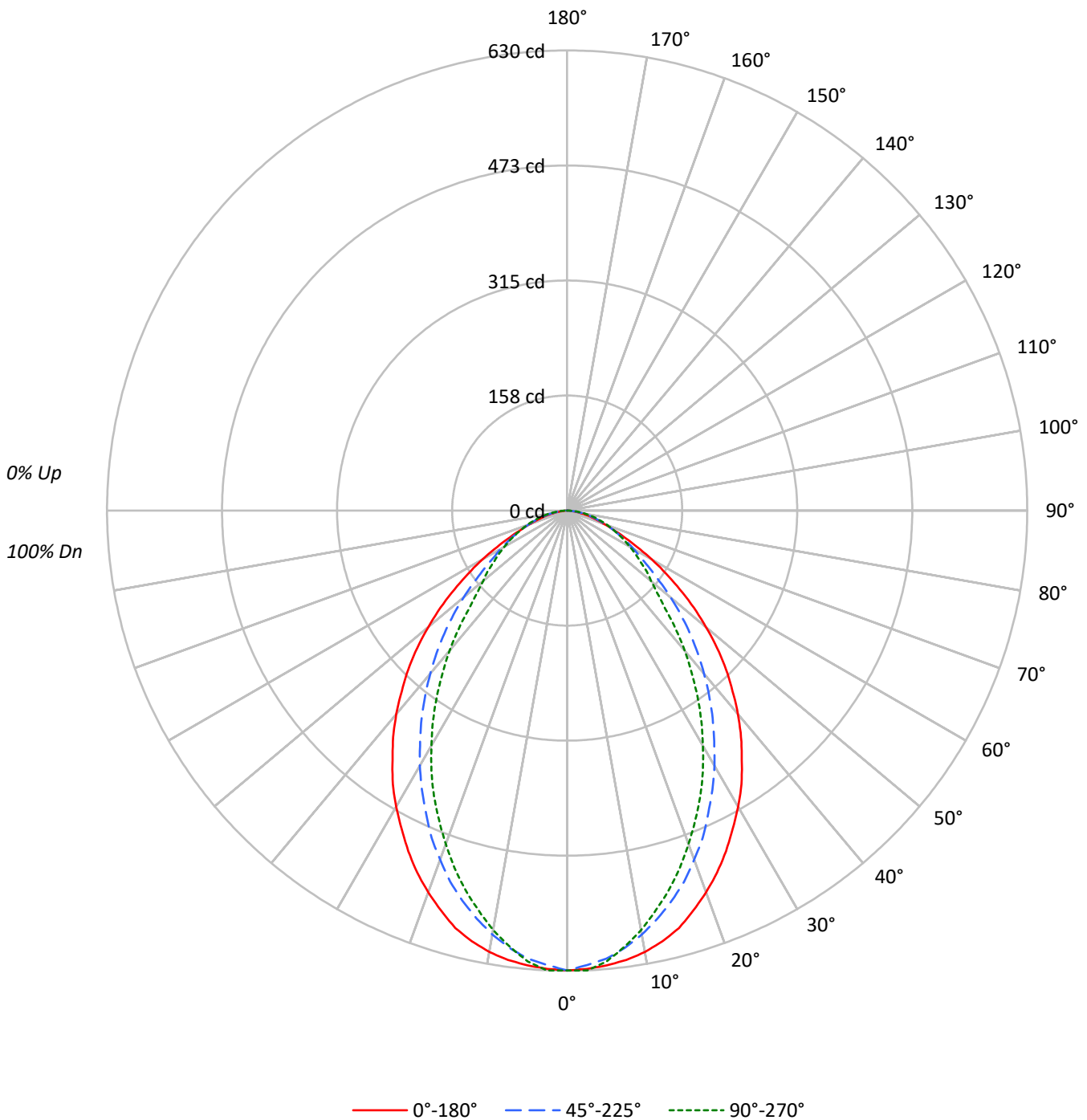
Lumens per Lamp: N/A
Luminaire Lumens: 1101.0 lumens
Efficiency: N/A
Efficacy: 42.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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°	7392	7392	7392
5°	7366	7260	7303
10°	7316	7028	6955
15°	7192	6724	6539
20°	6949	6353	6069
25°	6666	5921	5588
30°	6350	5468	5037
35°	5976	4978	4458
40°	5578	4465	3838
45°	5113	3946	3154
50°	4534	3387	2737
55°	3857	2835	2510
60°	3145	2471	2327
65°	2398	2187	2164
70°	1871	1947	2026
75°	1511	1751	1887
80°	1123	1434	1738
85°	606	916	1522

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5113 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.4	5.3
10°-20°	157.2	14.3
20°-30°	213.7	19.4
30°-40°	221.6	20.1
40°-50°	186.9	17.0
50°-60°	132.6	12.0
60°-70°	81.1	7.4
70°-80°	40.3	3.7
80°-90°	9.1	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°	429.4	39.0
0°-40°	650.9	59.1
0°-60°	970.4	88.1
0°-90°	1101.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1101.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	625	625	616	620	620	59
15°	592	580	553	543	538	166
25°	514	492	457	440	431	236
35°	417	385	347	323	311	261
45°	308	275	238	205	190	236
55°	188	169	138	126	123	169
65°	86	83	79	79	78	88
75°	33	36	39	40	42	36
85°	4	5	7	10	11	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	629.5	629.5	629.5	629.5	629.5
2.5°	628.0	628.7	622.7	629.5	630.2
5°	624.9	624.9	615.9	619.6	619.6
7.5°	620.4	618.9	603.8	603.8	602.2
10°	613.6	609.0	589.4	585.6	583.3
12.5°	603.8	596.2	572.0	565.2	560.6
15°	591.6	580.3	553.1	543.2	537.9
17.5°	574.2	562.9	532.6	519.0	513.0
20°	556.1	539.4	508.4	494.8	485.7
22.5°	536.4	515.2	485.0	468.3	458.5
25°	514.5	491.8	457.0	440.3	431.3
27.5°	491.0	466.1	430.5	411.6	402.5
30°	468.3	439.6	403.3	382.1	371.5
32.5°	444.1	411.6	374.5	352.6	342.0
35°	416.9	385.1	347.3	323.1	311.0
37.5°	391.2	358.6	319.3	293.6	279.9
40°	363.9	331.4	291.3	264.8	250.4
42.5°	335.2	304.1	264.8	233.8	220.2
45°	307.9	275.4	237.6	205.0	189.9
47.5°	278.4	248.2	211.1	177.8	167.2
50°	248.2	220.2	185.4	155.1	149.8
52.5°	218.7	195.2	159.6	140.0	137.7
55°	188.4	168.7	138.5	126.3	122.6
57.5°	160.4	146.0	118.8	112.7	111.2
60°	133.9	121.8	105.2	101.4	99.1
62.5°	108.2	101.4	91.5	90.0	88.5
65°	86.3	83.2	78.7	78.7	77.9
67.5°	68.1	68.1	67.3	68.8	68.1
70°	54.5	55.2	56.7	58.3	59.0
72.5°	43.1	45.4	46.9	49.2	49.9
75°	33.3	35.6	38.6	40.1	41.6
77.5°	24.2	26.5	29.5	31.8	33.3
80°	16.6	18.2	21.2	24.2	25.7
82.5°	10.6	11.3	13.6	16.6	18.2
85°	4.5	5.3	6.8	9.8	11.3
87.5°	0.0	0.0	0.8	3.0	5.3
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	15.76	17.21	16.12	17.52	17.84	13.85	15.30	14.22	15.62	15.93
	3H	16.66	17.95	17.03	18.28	18.64	15.43	16.72	15.81	17.05	17.41
	4H	16.94	18.15	17.34	18.50	18.88	16.02	17.24	16.42	17.58	17.96
	6H	17.09	18.21	17.50	18.57	18.97	16.47	17.59	16.89	17.96	18.35
	8H	17.11	18.17	17.54	18.56	18.97	16.62	17.69	17.05	18.08	18.48
	12H	17.10	18.12	17.54	18.50	18.93	16.72	17.74	17.15	18.12	18.55
4H	2H	16.00	17.21	16.40	17.56	17.94	14.40	15.61	14.80	15.96	16.34
	3H	17.12	18.12	17.53	18.52	18.92	16.17	17.17	16.58	17.57	17.97
	4H	17.51	18.40	17.94	18.82	19.26	16.88	17.78	17.32	18.20	18.64
	6H	17.75	18.53	18.21	18.97	19.43	17.45	18.23	17.91	18.68	19.14
	8H	17.79	18.52	18.26	18.96	19.43	17.65	18.37	18.11	18.82	19.29
	12H	17.80	18.45	18.28	18.93	19.40	17.78	18.43	18.27	18.91	19.38
8H	4H	17.66	18.39	18.13	18.84	19.31	17.09	17.82	17.56	18.26	18.73
	6H	17.98	18.58	18.48	19.07	19.55	17.77	18.37	18.27	18.86	19.34
	8H	18.05	18.59	18.57	19.10	19.59	18.02	18.56	18.54	19.07	19.56
	12H	18.09	18.56	18.60	19.05	19.62	18.23	18.71	18.74	19.20	19.77
12H	4H	17.67	18.32	18.15	18.80	19.27	17.09	17.74	17.57	18.22	18.69
	6H	17.99	18.53	18.51	19.04	19.53	17.78	18.31	18.29	18.83	19.32
	8H	18.11	18.58	18.62	19.07	19.64	18.08	18.55	18.59	19.05	19.61