

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: P1059364

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059364
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S775D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

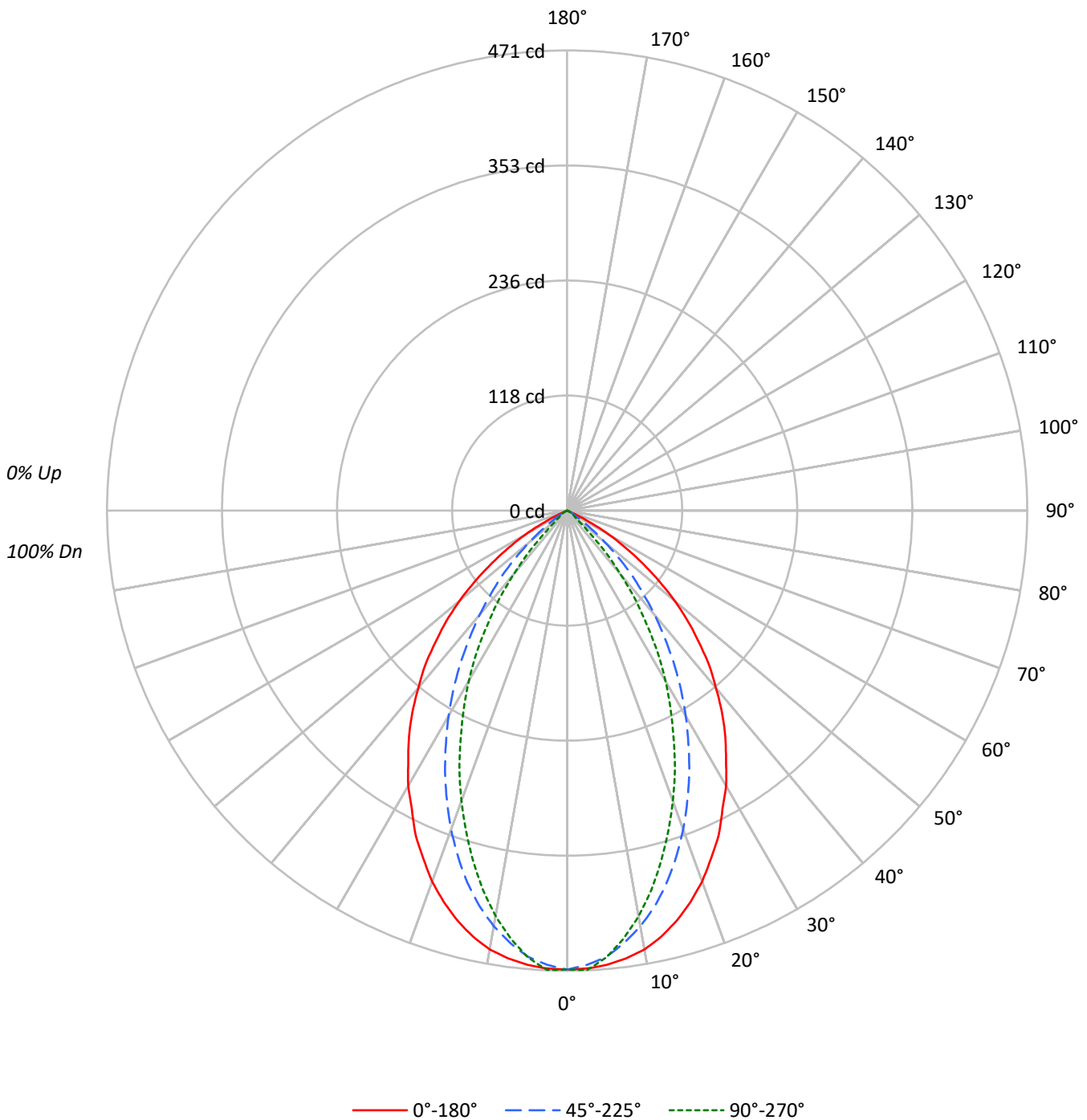
Lumens per Lamp: N/A
Luminaire Lumens: 536.1 lumens
Efficiency: N/A
Efficacy: 20.8 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5517	5517	5517
5°	5502	5404	5413
10°	5440	5151	5025
15°	5280	4792	4516
20°	5048	4340	3951
25°	4754	3832	3343
30°	4411	3292	2728
35°	4045	2722	2028
40°	3630	2134	1298
45°	3165	1558	540
50°	2625	926	206
55°	1937	387	156
60°	1172	143	89
65°	314	83	42
70°	0	27	27
75°	0	0	36
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3165 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	8.1
10°-20°	111.6	20.8
20°-30°	139.1	25.9
30°-40°	124.4	23.2
40°-50°	78.5	14.6
50°-60°	32.9	6.1
60°-70°	6.2	1.2
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	294.0	54.8
0°-40°	418.4	78.0
0°-60°	529.7	98.8
0°-90°	536.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	536.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	467	466	458	460	459	44
15°	434	424	394	378	372	122
25°	367	337	296	270	258	168
35°	282	241	190	156	142	176
45°	191	148	94	50	32	147
55°	95	65	19	8	8	85
65°	11	8	3	2	2	16
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.8	469.8	469.8	469.8	469.8
2.5°	469.1	469.8	465.3	469.8	470.6
5°	466.8	466.0	458.5	460.0	459.2
7.5°	462.2	460.0	446.4	443.3	441.8
10°	456.2	450.1	432.0	424.4	421.4
12.5°	446.4	438.0	414.6	402.5	397.9
15°	434.3	423.7	394.2	377.5	371.5
17.5°	419.9	404.7	371.5	353.3	344.2
20°	404.0	382.8	347.3	325.3	316.2
22.5°	385.1	361.6	321.5	298.1	288.2
25°	366.9	337.4	295.8	270.1	258.0
27.5°	344.2	313.2	268.6	242.1	229.2
30°	325.3	289.8	242.8	213.3	201.2
32.5°	302.6	265.5	216.4	183.8	172.5
35°	282.2	241.3	189.9	155.8	141.5
37.5°	260.2	217.9	163.4	127.9	114.2
40°	236.8	194.4	139.2	99.9	84.7
42.5°	215.6	171.0	115.0	74.1	59.0
45°	190.6	148.3	93.8	49.9	32.5
47.5°	168.0	127.1	71.1	28.0	17.4
50°	143.7	105.2	50.7	14.4	11.3
52.5°	118.8	84.0	33.3	9.8	9.1
55°	94.6	65.1	18.9	7.6	7.6
57.5°	71.1	46.9	9.8	6.1	5.3
60°	49.9	31.0	6.1	4.5	3.8
62.5°	28.7	18.2	4.5	3.0	3.0
65°	11.3	8.3	3.0	1.5	1.5
67.5°	0.8	2.3	1.5	0.8	0.8
70°	0.0	0.0	0.8	0.8	0.8
72.5°	0.0	0.0	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.0	0.8
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	11.12	12.30	11.49	12.61	12.93	0.00	0.00	0.00	0.00	0.00
	3H	10.96	11.99	11.34	12.33	12.69	0.00	0.00	0.00	0.00	0.00
	4H	10.88	11.83	11.28	12.18	12.57	0.00	0.00	0.00	0.00	0.00
	6H	10.78	11.66	11.20	12.03	12.42	0.00	0.00	0.00	0.00	0.00
	8H	10.73	11.56	11.17	11.95	12.36	0.00	0.00	0.00	0.00	0.00
	12H	10.68	11.47	11.12	11.85	12.28	0.00	0.00	0.00	0.00	0.00
4H	2H	10.88	11.84	11.29	12.19	12.57	0.00	0.00	0.00	0.00	0.00
	3H	10.72	11.49	11.13	11.89	12.30	0.00	0.00	0.00	0.00	0.00
	4H	10.61	11.29	11.05	11.72	12.16	0.00	0.00	0.00	0.00	0.00
	6H	10.52	11.10	10.98	11.55	12.02	0.00	0.00	0.00	0.00	0.00
	8H	10.45	11.00	10.92	11.44	11.92	0.00	0.00	0.00	0.00	0.00
	12H	10.39	10.87	10.88	11.36	11.83	0.00	0.00	0.00	0.00	0.00
8H	4H	10.45	11.00	10.92	11.44	11.92	0.00	0.00	0.00	0.00	0.00
	6H	10.33	10.77	10.84	11.27	11.76	0.00	0.00	0.00	0.00	0.00
	8H	10.26	10.66	10.79	11.18	11.67	0.00	0.00	0.00	0.00	0.00
	12H	10.21	10.56	10.73	11.06	11.63	0.00	0.00	0.00	0.00	0.00
12H	4H	10.39	10.87	10.88	11.36	11.83	0.00	0.00	0.00	0.00	0.00
	6H	10.26	10.66	10.79	11.18	11.67	0.00	0.00	0.00	0.00	0.00
	8H	10.21	10.56	10.73	11.06	11.63	0.00	0.00	0.00	0.00	0.00