

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: P1059366

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059366
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-66)
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-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

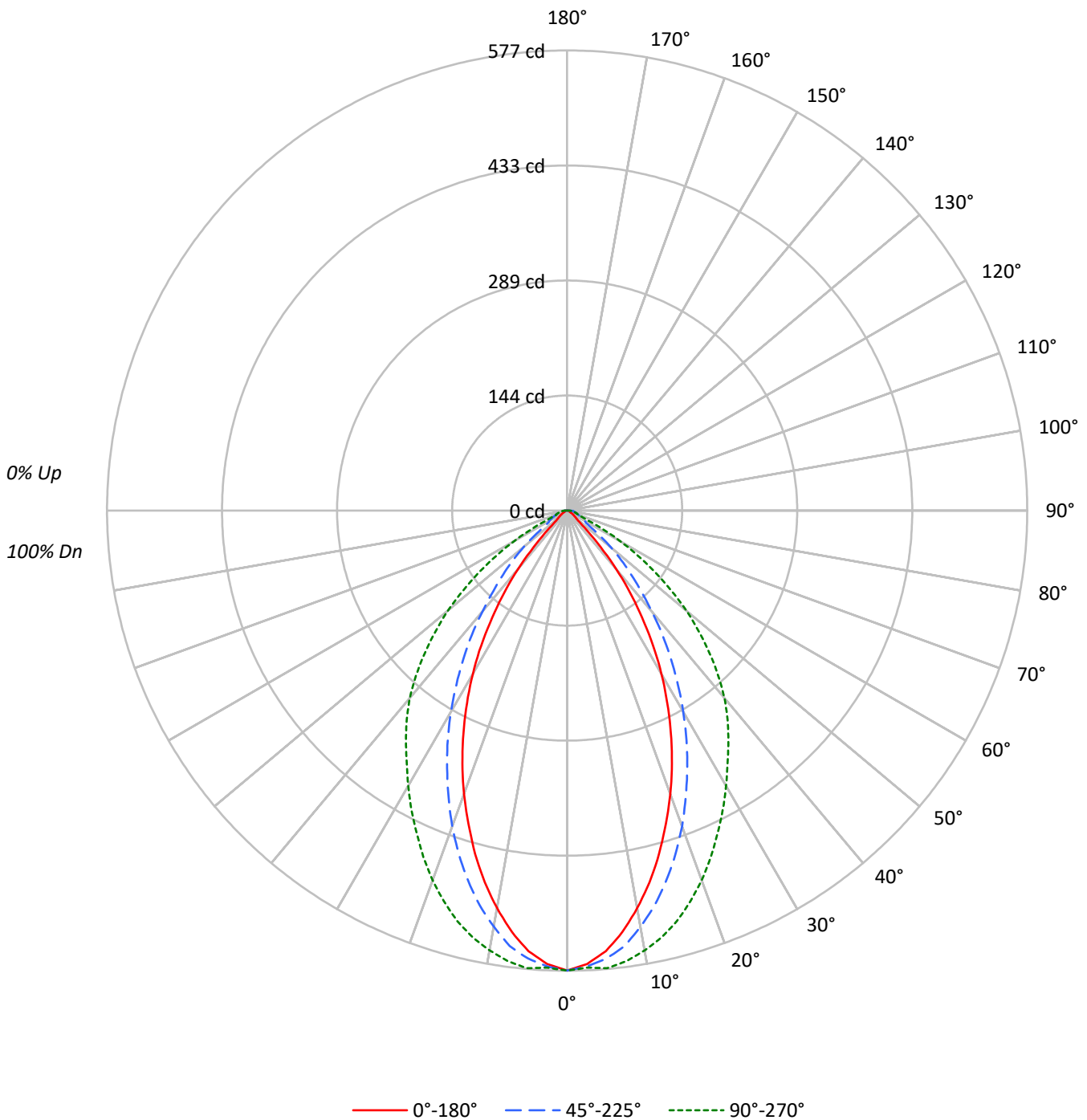
Lumens per Lamp: N/A
Luminaire Lumens: 692.4 lumens
Efficiency: N/A
Efficacy: 26.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	88	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	49	58	52	48	57	52	48	47
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6772	6772	6772
5°	6538	6646	6788
10°	6036	6316	6677
15°	5417	5840	6476
20°	4725	5265	6164
25°	3987	4614	5782
30°	3205	3946	5405
35°	2347	3248	5052
40°	1464	2532	4704
45°	553	1888	4190
50°	263	1301	3571
55°	203	714	2762
60°	143	606	1815
65°	106	525	759
70°	103	494	494
75°	136	517	517
80°	203	615	561
85°	404	1024	822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4190 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	7.6
10°-20°	135.7	19.6
20°-30°	168.0	24.3
30°-40°	150.6	21.8
40°-50°	98.8	14.3
50°-60°	49.4	7.1
60°-70°	19.3	2.8
70°-80°	10.9	1.6
80°-90°	6.7	1.0
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°	356.7	51.5
0°-40°	507.3	73.3
0°-60°	655.5	94.7
0°-90°	692.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	692.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	555	564	564	570	576	51
15°	446	464	480	512	533	124
25°	308	327	356	407	446	140
35°	164	186	227	295	352	102
45°	33	54	114	195	252	32
55°	10	12	35	96	135	9
65°	4	11	19	25	27	4
75°	3	11	11	11	11	3
85°	3	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	576.7	576.7	576.7	576.7	576.7
2.5°	569.1	577.4	572.1	572.9	573.6
5°	554.7	563.8	563.8	569.8	575.9
7.5°	532.7	543.3	550.9	561.5	569.8
10°	506.2	519.1	529.7	548.6	560.0
12.5°	477.4	493.3	506.9	531.9	547.9
15°	445.6	463.8	480.4	512.2	532.7
17.5°	411.5	429.7	451.6	488.8	513.8
20°	378.1	396.3	421.3	463.0	493.3
22.5°	343.3	362.2	388.7	435.0	470.6
25°	307.7	326.6	356.1	406.9	446.3
27.5°	272.0	291.0	324.3	379.6	422.8
30°	236.4	255.4	291.0	350.1	398.6
32.5°	200.8	221.3	258.4	322.8	374.3
35°	163.7	185.7	226.6	294.8	352.4
37.5°	129.6	150.0	196.3	270.5	330.4
40°	95.5	117.5	165.2	247.0	306.9
42.5°	62.1	85.6	137.2	221.3	280.4
45°	33.3	53.8	113.7	194.7	252.3
47.5°	18.2	29.6	91.7	166.7	223.5
50°	14.4	16.7	71.2	142.5	195.5
52.5°	12.1	13.6	50.8	119.7	164.4
55°	9.9	12.1	34.9	95.5	134.9
57.5°	8.3	10.6	27.3	74.3	105.3
60°	6.1	9.1	25.8	54.6	77.3
62.5°	4.5	9.9	22.7	37.9	50.8
65°	3.8	11.4	18.9	25.0	27.3
67.5°	3.0	12.1	16.7	15.9	15.9
70°	3.0	11.4	14.4	13.6	14.4
72.5°	3.0	12.1	12.9	12.1	12.9
75°	3.0	11.4	11.4	11.4	11.4
77.5°	3.0	10.6	10.6	9.9	9.9
80°	3.0	9.1	9.1	9.1	8.3
82.5°	3.0	8.3	8.3	8.3	6.8
85°	3.0	7.6	7.6	7.6	6.1
87.5°	2.3	6.8	7.6	6.8	4.5
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	0.00	0.25	0.00	0.56	0.88	13.25	14.51	13.62	14.82	15.14
	3H	1.32	2.43	1.70	2.76	3.13	13.33	14.44	13.71	14.77	15.14
	4H	2.43	3.46	2.83	3.81	4.19	13.41	14.44	13.81	14.79	15.18
	6H	3.41	4.36	3.83	4.73	5.12	13.51	14.46	13.93	14.83	15.23
	8H	3.89	4.78	4.32	5.18	5.58	13.57	14.47	14.00	14.86	15.27
	12H	4.44	5.30	4.87	5.68	6.11	13.65	14.51	14.09	14.89	15.33
4H	2H	2.24	3.27	2.64	3.62	4.01	13.11	14.14	13.51	14.49	14.88
	3H	4.56	5.41	4.98	5.81	6.22	13.28	14.13	13.69	14.53	14.93
	4H	5.94	6.69	6.37	7.11	7.56	13.43	14.19	13.87	14.61	15.05
	6H	7.02	7.67	7.49	8.12	8.59	13.66	14.31	14.12	14.76	15.23
	8H	7.47	8.08	7.94	8.53	9.00	13.78	14.39	14.25	14.84	15.31
	12H	7.96	8.50	8.45	8.99	9.46	13.96	14.50	14.45	14.98	15.45
8H	4H	6.91	7.52	7.39	7.97	8.44	13.43	14.04	13.90	14.49	14.96
	6H	8.43	8.93	8.94	9.43	9.91	13.77	14.27	14.27	14.77	15.25
	8H	9.20	9.65	9.72	10.17	10.66	14.00	14.45	14.52	14.97	15.46
	12H	10.00	10.40	10.52	10.90	11.47	14.34	14.73	14.85	15.23	15.80
12H	4H	7.09	7.63	7.58	8.11	8.59	13.42	13.95	13.90	14.44	14.91
	6H	8.75	9.20	9.27	9.71	10.21	13.79	14.24	14.31	14.75	15.25
	8H	9.70	10.10	10.21	10.59	11.16	14.10	14.49	14.61	14.99	15.56