

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: P1059375

Luminaire Tested: S123RDRP-S775D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059375
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-S775D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

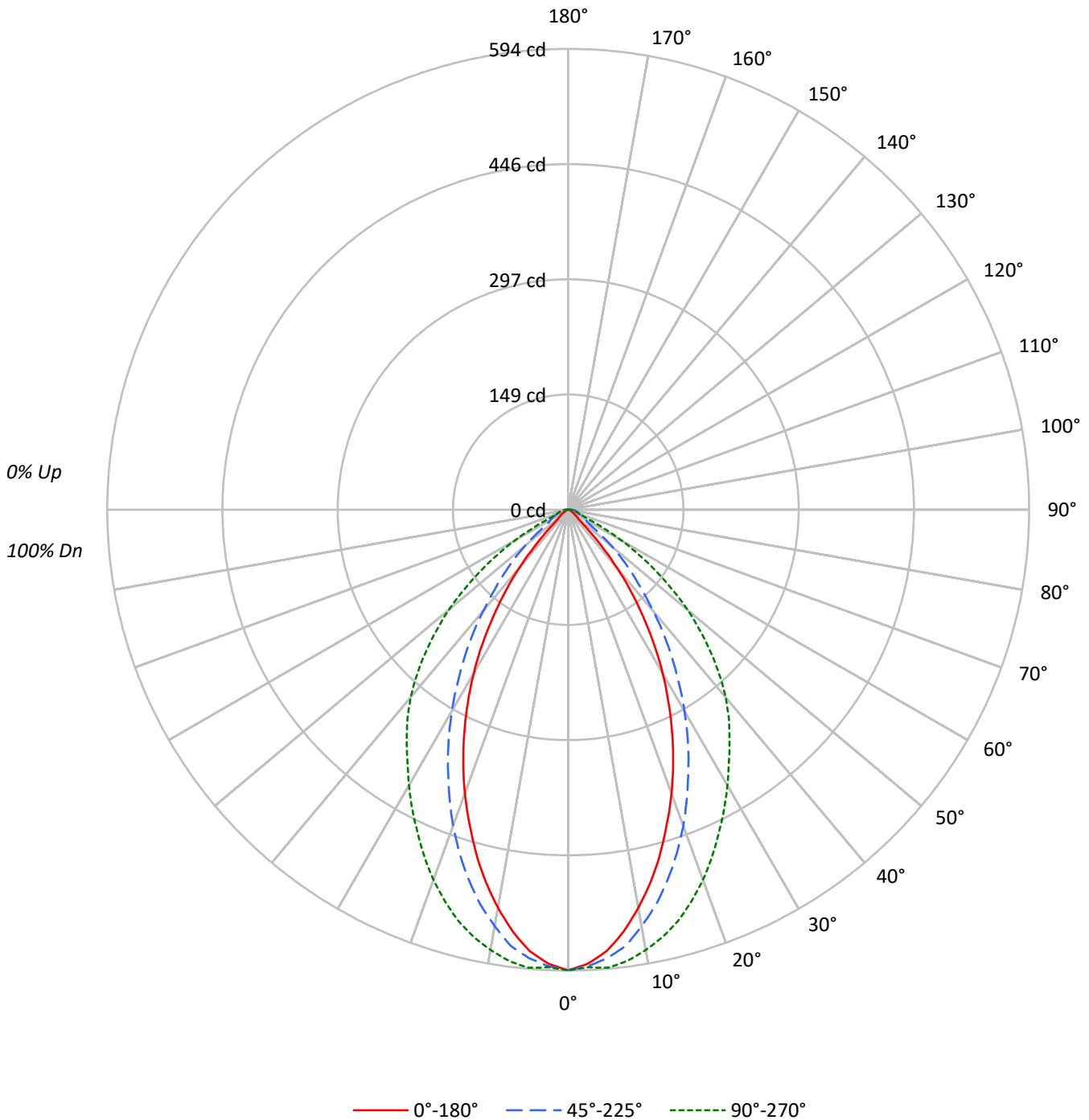
Lumens per Lamp: N/A
Luminaire Lumens: 712.5 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	6969	6969	6969
5°	6729	6839	6986
10°	6212	6500	6872
15°	5575	6010	6665
20°	4863	5418	6344
25°	4102	4749	5951
30°	3299	4061	5562
35°	2415	3343	5198
40°	1507	2606	4841
45°	570	1943	4313
50°	270	1339	3676
55°	207	735	2842
60°	146	622	1867
65°	108	542	781
70°	106	508	508
75°	141	531	531
80°	210	636	582
85°	418	1051	835

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.5	7.6
10°-20°	139.7	19.6
20°-30°	172.9	24.3
30°-40°	155.0	21.8
40°-50°	101.6	14.3
50°-60°	50.9	7.1
60°-70°	19.8	2.8
70°-80°	11.2	1.6
80°-90°	6.9	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°	367.1	51.5
0°-40°	522.1	73.3
0°-60°	674.6	94.7
0°-90°	712.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	712.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	571	580	580	586	593	53
15°	459	477	494	527	548	128
25°	317	336	366	419	459	145
35°	168	191	233	303	363	105
45°	34	55	117	200	260	33
55°	10	12	36	98	139	9
65°	4	12	20	26	28	4
75°	3	12	12	12	12	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°	593.5	593.5	593.5	593.5	593.5
2.5°	585.7	594.3	588.8	589.6	590.4
5°	570.9	580.2	580.2	586.5	592.7
7.5°	548.3	559.2	567.0	577.9	586.5
10°	521.0	534.2	545.1	564.6	576.3
12.5°	491.3	507.7	521.7	547.5	563.8
15°	458.6	477.3	494.4	527.2	548.3
17.5°	423.5	442.2	464.8	503.0	528.8
20°	389.2	407.9	433.6	476.5	507.7
22.5°	353.3	372.8	400.1	447.6	484.3
25°	316.6	336.1	366.5	418.8	459.3
27.5°	280.0	299.5	333.8	390.7	435.2
30°	243.3	262.8	299.5	360.3	410.2
32.5°	206.7	227.7	265.9	332.2	385.3
35°	168.5	191.1	233.2	303.4	362.6
37.5°	133.4	154.4	202.0	278.4	340.0
40°	98.3	120.9	170.0	254.2	315.8
42.5°	63.9	88.1	141.2	227.7	288.6
45°	34.3	55.4	117.0	200.4	259.7
47.5°	18.7	30.4	94.4	171.6	230.1
50°	14.8	17.2	73.3	146.6	201.2
52.5°	12.5	14.0	52.3	123.2	169.2
55°	10.1	12.5	35.9	98.3	138.8
57.5°	8.6	10.9	28.1	76.4	108.4
60°	6.2	9.4	26.5	56.2	79.5
62.5°	4.7	10.1	23.4	39.0	52.3
65°	3.9	11.7	19.5	25.7	28.1
67.5°	3.1	12.5	17.2	16.4	16.4
70°	3.1	11.7	14.8	14.0	14.8
72.5°	3.1	12.5	13.3	12.5	13.3
75°	3.1	11.7	11.7	11.7	11.7
77.5°	3.1	10.9	10.9	10.1	10.1
80°	3.1	9.4	9.4	9.4	8.6
82.5°	3.1	8.6	8.6	8.6	7.0
85°	3.1	7.8	7.8	7.8	6.2
87.5°	2.3	7.0	7.8	7.0	4.7
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	0.35	0.00	0.66	0.98	13.35	14.60	13.71	14.92	15.23
	3H	1.43	2.54	1.81	2.87	3.24	13.43	14.54	13.81	14.87	15.24
	4H	2.53	3.57	2.94	3.92	4.30	13.51	14.54	13.91	14.89	15.28
	6H	3.52	4.47	3.93	4.84	5.23	13.61	14.56	14.03	14.93	15.32
	8H	4.00	4.90	4.43	5.29	5.69	13.67	14.57	14.10	14.96	15.36
	12H	4.55	5.41	4.99	5.80	6.23	13.75	14.61	14.18	14.99	15.42
4H	2H	2.35	3.38	2.75	3.74	4.12	13.20	14.24	13.61	14.59	14.97
	3H	4.67	5.52	5.08	5.92	6.32	13.38	14.22	13.79	14.63	15.03
	4H	6.04	6.79	6.48	7.22	7.66	13.53	14.29	13.97	14.71	15.15
	6H	7.13	7.78	7.59	8.22	8.69	13.76	14.41	14.22	14.85	15.32
	8H	7.58	8.19	8.05	8.64	9.11	13.88	14.49	14.35	14.94	15.41
	12H	8.07	8.61	8.56	9.10	9.57	14.05	14.59	14.54	15.08	15.55
8H	4H	7.01	7.62	7.48	8.07	8.54	13.53	14.14	14.00	14.58	15.06
	6H	8.54	9.04	9.04	9.54	10.02	13.87	14.36	14.37	14.86	15.34
	8H	9.31	9.76	9.84	10.28	10.77	14.10	14.55	14.62	15.06	15.56
	12H	10.12	10.51	10.63	11.01	11.58	14.43	14.83	14.95	15.33	15.90
12H	4H	7.19	7.73	7.68	8.21	8.69	13.51	14.05	14.00	14.53	15.01
	6H	8.86	9.31	9.38	9.82	10.31	13.89	14.33	14.41	14.85	15.34
	8H	9.81	10.21	10.33	10.71	11.28	14.20	14.59	14.71	15.09	15.66