

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058487

Luminaire Tested: S122RDR-H675D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058487
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D930-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

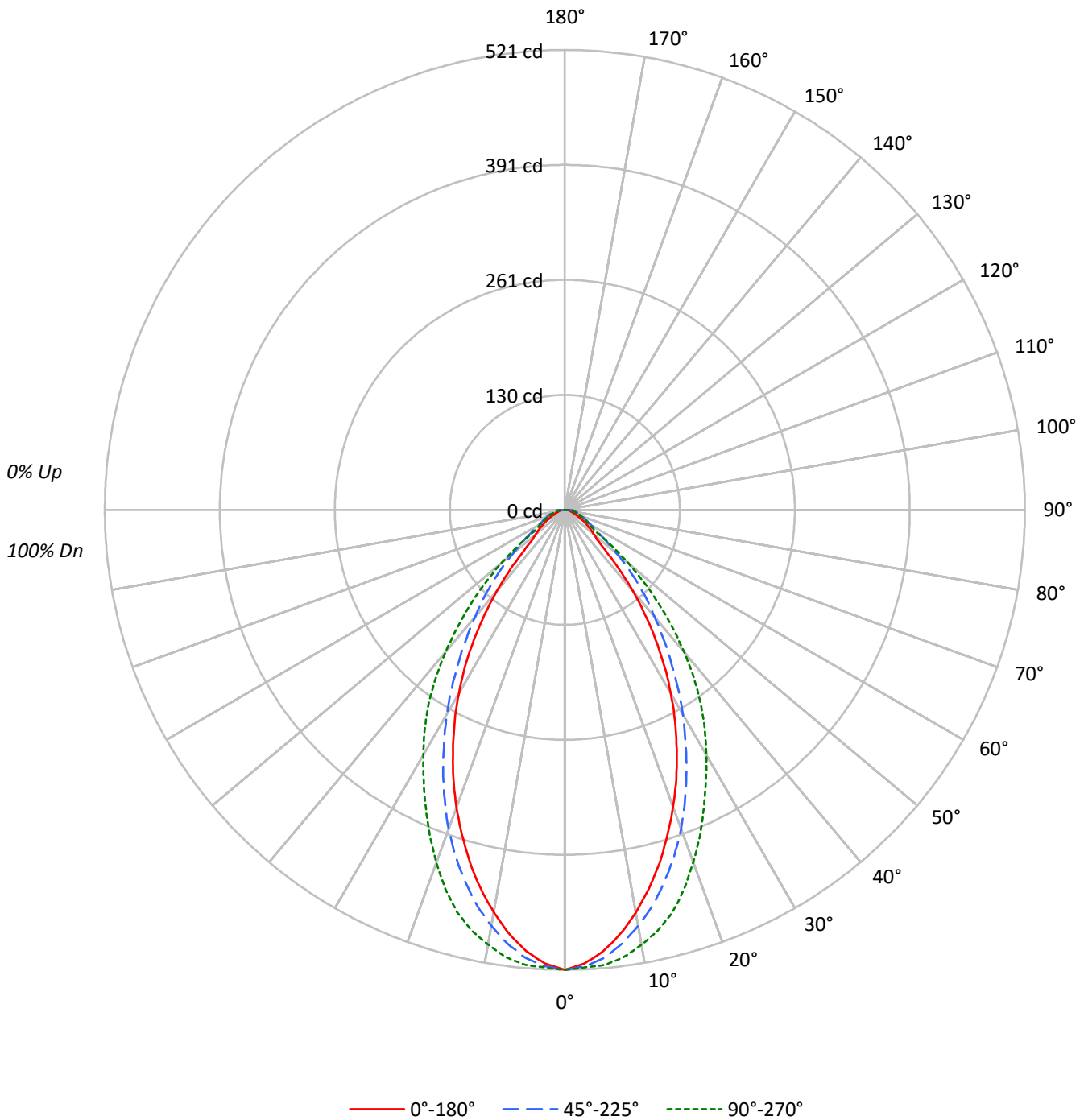
Lumens per Lamp: N/A
Luminaire Lumens: 632.2 lumens
Efficiency: N/A
Efficacy: 26.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): 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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9617	9617	9617
5°	9297	9439	9584
10°	8679	8968	9374
15°	7916	8329	9011
20°	7042	7558	8350
25°	6102	6639	7584
30°	5116	5693	6831
35°	4030	4710	6055
40°	2874	3806	5056
45°	1699	3011	3922
50°	1223	2179	2667
55°	1023	1570	1345
60°	830	1258	1144
65°	677	1118	1048
70°	583	1084	1003
75°	549	1105	991
80°	574	1318	1073
85°	826	2138	1313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3922 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.8	7.6
10°-20°	122.8	19.4
20°-30°	151.5	24.0
30°-40°	134.8	21.3
40°-50°	86.0	13.6
50°-60°	41.3	6.5
60°-70°	24.3	3.8
70°-80°	15.5	2.4
80°-90°	8.2	1.3
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°	322.2	51.0
0°-40°	456.9	72.3
0°-60°	584.3	92.4
0°-90°	632.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	632.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	502	511	510	513	517	47
15°	414	424	436	456	472	116
25°	300	311	326	349	372	137
35°	179	193	209	241	269	111
45°	65	84	115	134	150	55
55°	32	41	49	47	42	29
65°	16	28	26	23	24	16
75°	8	17	16	15	14	8
85°	4	9	10	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	521.2	521.2	521.2	521.2	521.2
2.5°	514.3	522.8	517.4	517.4	518.9
5°	501.9	511.2	509.6	512.7	517.4
7.5°	484.1	494.1	495.7	504.2	511.2
10°	463.2	474.0	478.6	491.0	500.3
12.5°	439.9	450.8	459.3	474.8	487.9
15°	414.4	424.4	436.0	456.2	471.7
17.5°	386.5	399.6	411.3	432.2	450.0
20°	358.6	371.0	384.9	405.1	425.2
22.5°	329.9	341.6	355.5	376.4	399.6
25°	299.7	311.4	326.1	349.3	372.5
27.5°	270.3	281.9	295.9	321.4	346.2
30°	240.1	251.7	267.2	293.5	320.6
32.5°	209.9	222.3	237.8	266.4	295.1
35°	178.9	192.9	209.1	240.9	268.8
37.5°	148.7	162.6	182.8	213.8	240.1
40°	119.3	135.5	158.0	185.9	209.9
42.5°	90.6	108.4	136.3	158.8	179.7
45°	65.1	84.4	115.4	134.0	150.3
47.5°	49.6	63.5	95.3	110.0	121.6
50°	42.6	51.1	75.9	86.7	92.9
52.5°	37.2	44.9	60.4	65.8	65.8
55°	31.8	41.0	48.8	47.2	41.8
57.5°	27.1	37.2	40.3	34.1	35.6
60°	22.5	34.1	34.1	30.2	31.0
62.5°	18.6	31.8	29.4	26.3	27.1
65°	15.5	27.9	25.6	23.2	24.0
67.5°	12.4	24.8	22.5	20.9	20.9
70°	10.8	22.5	20.1	18.6	18.6
72.5°	9.3	19.4	17.8	16.3	16.3
75°	7.7	17.0	15.5	14.7	13.9
77.5°	7.0	14.7	13.9	12.4	11.6
80°	5.4	12.4	12.4	11.6	10.1
82.5°	4.6	10.8	10.8	10.1	8.5
85°	3.9	9.3	10.1	8.5	6.2
87.5°	3.1	8.5	8.5	7.0	4.6
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	9.54	10.82	9.91	11.13	11.44	9.33	10.61	9.69	10.92	11.23
	3H	10.77	11.91	11.15	12.24	12.60	10.92	12.05	11.30	12.39	12.75
	4H	11.22	12.28	11.62	12.63	13.01	11.64	12.69	12.04	13.04	13.43
	6H	11.60	12.58	12.02	12.95	13.34	12.29	13.26	12.70	13.63	14.03
	8H	11.75	12.68	12.18	13.07	13.47	12.62	13.54	13.05	13.93	14.34
	12H	11.91	12.79	12.34	13.18	13.61	12.91	13.80	13.35	14.18	14.61
4H	2H	10.09	11.15	10.49	11.50	11.88	9.92	10.98	10.33	11.33	11.72
	3H	11.78	12.66	12.20	13.06	13.46	11.76	12.63	12.17	13.03	13.44
	4H	12.58	13.36	13.01	13.78	14.22	12.63	13.41	13.07	13.83	14.28
	6H	13.22	13.90	13.68	14.34	14.81	13.47	14.15	13.94	14.60	15.07
	8H	13.47	14.10	13.93	14.55	15.02	13.90	14.53	14.37	14.98	15.45
	12H	13.71	14.27	14.20	14.76	15.23	14.30	14.86	14.79	15.34	15.82
8H	4H	12.99	13.63	13.46	14.07	14.54	13.05	13.68	13.52	14.13	14.60
	6H	13.97	14.49	14.47	14.99	15.47	14.13	14.65	14.64	15.15	15.63
	8H	14.46	14.92	14.98	15.44	15.93	14.73	15.19	15.25	15.71	16.20
	12H	14.96	15.37	15.48	15.87	16.44	15.33	15.74	15.84	16.23	16.81
12H	4H	13.06	13.62	13.55	14.10	14.58	13.12	13.68	13.61	14.17	14.64
	6H	14.14	14.60	14.66	15.12	15.61	14.30	14.76	14.82	15.28	15.77
	8H	14.77	15.18	15.29	15.68	16.25	15.01	15.42	15.52	15.92	16.49