

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: P1058486

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058486
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)
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-S
Description: DEFINE 2 SILVER 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

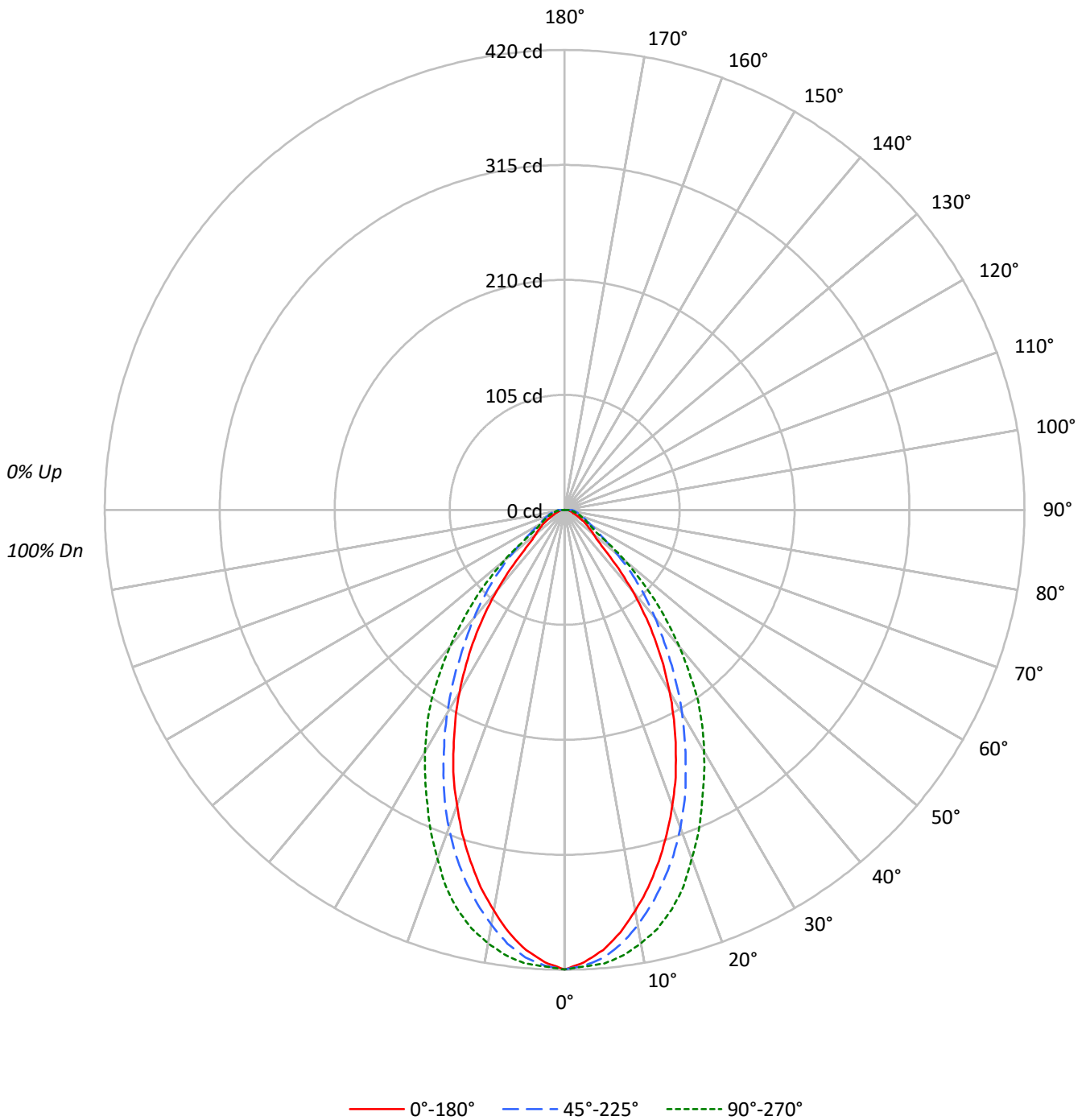
Lumens per Lamp: N/A
Luminaire Lumens: 506.3 lumens
Efficiency: N/A
Efficacy: 21.5 lumens/watt
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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									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	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	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80																												
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65																												
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59																												
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54																												
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50																												
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46																												
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42																												
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7745	7745	7745
5°	7474	7602	7702
10°	6965	7212	7530
15°	6346	6686	7219
20°	5642	6068	6661
25°	4888	5328	6039
30°	4091	4570	5429
35°	3228	3784	4780
40°	2312	3095	3917
45°	1354	2445	3032
50°	979	1780	2044
55°	824	1271	1071
60°	657	1030	915
65°	541	913	847
70°	459	879	793
75°	442	941	770
80°	489	1148	818
85°	826	1800	1143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3032 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.5	7.6
10°-20°	98.5	19.5
20°-30°	121.1	23.9
30°-40°	107.1	21.1
40°-50°	68.3	13.5
50°-60°	33.3	6.6
60°-70°	19.9	3.9
70°-80°	12.7	2.5
80°-90°	7.0	1.4
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°	258.1	51.0
0°-40°	365.1	72.1
0°-60°	466.8	92.2
0°-90°	506.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	506.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	404	412	410	412	416	38
15°	332	342	350	366	378	93
25°	240	249	262	278	297	110
35°	143	151	168	191	212	89
45°	52	67	94	105	116	44
55°	26	34	40	37	33	23
65°	12	23	21	19	19	12
75°	6	14	13	12	11	7
85°	4	8	8	8	5	4
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	419.7	419.7	419.7	419.7	419.7
2.5°	413.5	421.3	416.6	416.6	417.4
5°	403.5	412.0	410.4	412.0	415.8
7.5°	389.5	398.0	399.6	405.8	410.4
10°	371.7	380.2	384.9	394.9	401.9
12.5°	353.1	361.6	368.6	381.8	391.8
15°	332.2	341.5	350.0	365.5	377.9
17.5°	310.5	319.8	330.7	346.2	360.9
20°	287.3	295.8	309.0	323.7	339.2
22.5°	264.8	272.6	286.5	300.5	319.1
25°	240.1	248.6	261.7	278.0	296.6
27.5°	216.1	224.6	237.7	256.3	275.7
30°	192.0	199.8	214.5	233.9	254.8
32.5°	167.3	175.0	191.3	212.2	233.9
35°	143.3	151.0	168.0	191.3	212.2
37.5°	119.3	127.8	147.1	168.8	186.6
40°	96.0	106.1	128.5	147.1	162.6
42.5°	72.8	86.7	110.7	126.2	138.6
45°	51.9	66.6	93.7	105.3	116.2
47.5°	39.5	51.1	77.4	86.0	92.9
50°	34.1	41.8	62.0	68.1	71.2
52.5°	29.4	37.2	49.6	51.9	50.3
55°	25.6	34.1	39.5	37.2	33.3
57.5°	21.7	31.8	32.5	27.9	28.7
60°	17.8	28.7	27.9	24.0	24.8
62.5°	14.7	26.3	24.0	21.7	21.7
65°	12.4	23.2	20.9	19.4	19.4
67.5°	10.1	20.9	18.6	17.0	17.0
70°	8.5	18.6	16.3	14.7	14.7
72.5°	7.7	16.3	14.7	13.2	13.2
75°	6.2	13.9	13.2	11.6	10.8
77.5°	5.4	11.6	11.6	10.8	9.3
80°	4.6	10.1	10.8	9.3	7.7
82.5°	4.6	9.3	9.3	8.5	6.2
85°	3.9	7.7	8.5	7.7	5.4
87.5°	2.3	7.0	7.0	6.2	3.9
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	9.15	10.43	9.52	10.74	11.06	8.67	9.95	9.04	10.26	10.58
	3H	10.32	11.46	10.70	11.79	12.16	10.23	11.37	10.61	11.70	12.06
	4H	10.75	11.81	11.15	12.16	12.55	10.91	11.97	11.31	12.32	12.71
	6H	11.09	12.07	11.51	12.44	12.83	11.55	12.53	11.97	12.90	13.30
	8H	11.29	12.21	11.72	12.60	13.01	11.84	12.77	12.27	13.16	13.56
	12H	11.50	12.39	11.94	12.77	13.20	12.16	13.04	12.59	13.43	13.86
4H	2H	9.65	10.71	10.05	11.06	11.45	9.27	10.33	9.67	10.68	11.07
	3H	11.29	12.17	11.71	12.57	12.98	11.07	11.94	11.48	12.34	12.75
	4H	12.05	12.84	12.49	13.26	13.70	11.90	12.69	12.34	13.11	13.55
	6H	12.65	13.33	13.12	13.78	14.25	12.76	13.44	13.22	13.88	14.35
	8H	12.95	13.59	13.42	14.03	14.50	13.15	13.78	13.62	14.23	14.70
	12H	13.26	13.83	13.75	14.31	14.78	13.58	14.15	14.07	14.63	15.10
8H	4H	12.47	13.11	12.94	13.55	14.03	12.36	13.00	12.83	13.45	13.92
	6H	13.42	13.94	13.92	14.44	14.92	13.47	13.99	13.97	14.49	14.97
	8H	13.96	14.43	14.49	14.95	15.44	14.05	14.52	14.57	15.03	15.52
	12H	14.53	14.94	15.04	15.44	16.01	14.71	15.13	15.23	15.62	16.19
12H	4H	12.54	13.10	13.03	13.59	14.06	12.45	13.01	12.93	13.49	13.97
	6H	13.60	14.07	14.12	14.59	15.08	13.65	14.12	14.17	14.64	15.13
	8H	14.29	14.71	14.81	15.20	15.77	14.36	14.78	14.88	15.27	15.84