

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: P1058490

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058490
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D930-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

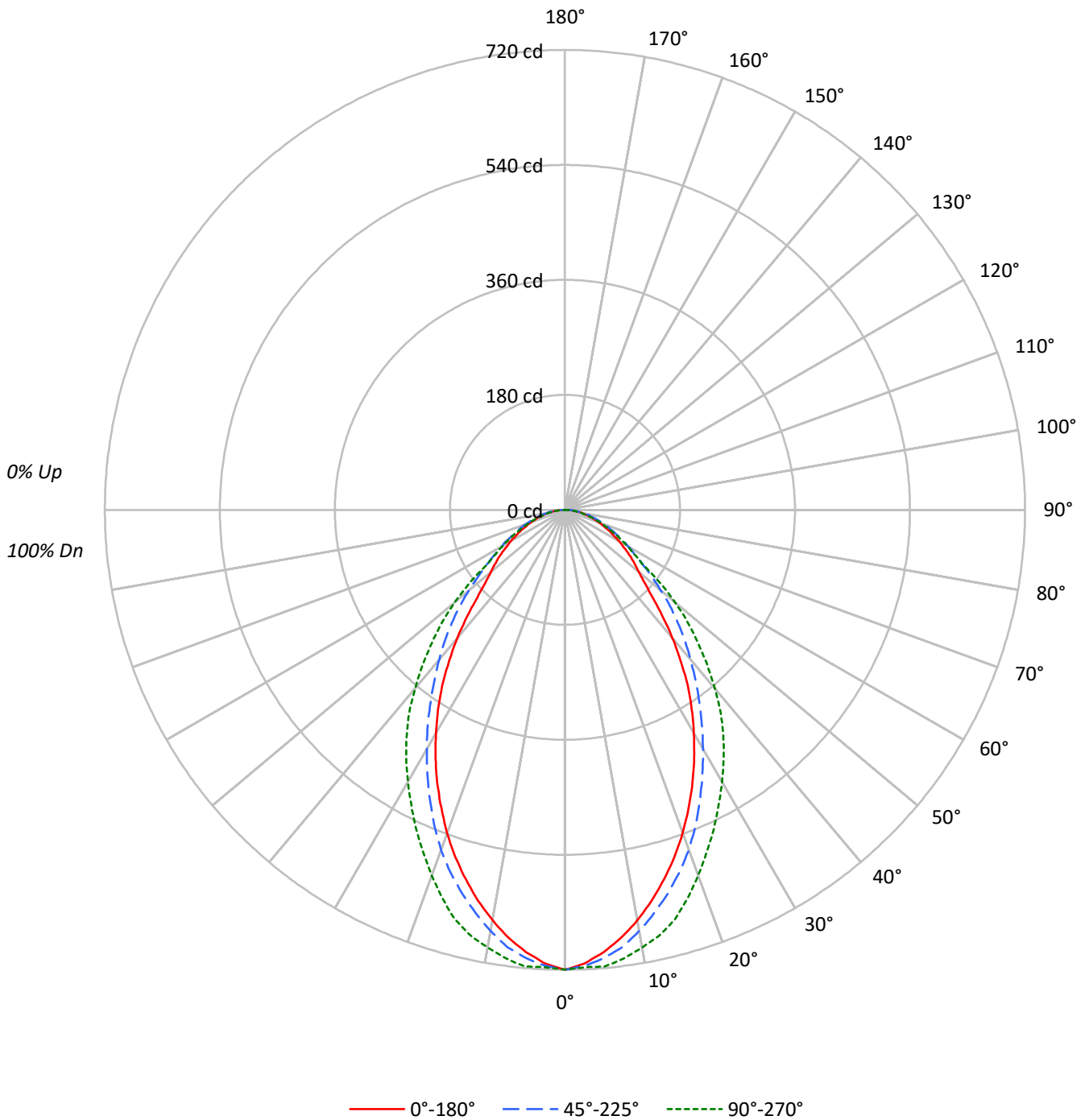
Lumens per Lamp: N/A
Luminaire Lumens: 1173.6 lumens
Efficiency: N/A
Efficacy: 49.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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				
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87				
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76				
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67				
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59				
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52				
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47				
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43				
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13282	13282	13282
5°	12875	13048	13290
10°	12226	12545	13037
15°	11445	11873	12687
20°	10578	11126	11963
25°	9614	10180	11220
30°	8593	9203	10472
35°	7533	8247	9729
40°	6301	7364	8782
45°	5050	6524	7675
50°	4332	5621	6445
55°	3960	4781	4755
60°	3598	4229	4141
65°	3279	3786	3615
70°	3005	3464	3216
75°	2816	3201	2816
80°	2635	2965	2465
85°	2625	3112	2138

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7675 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	5.7
10°-20°	175.9	15.0
20°-30°	232.0	19.8
30°-40°	233.7	19.9
40°-50°	190.2	16.2
50°-60°	129.7	11.0
60°-70°	84.2	7.2
70°-80°	46.4	3.9
80°-90°	15.1	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°	474.4	40.4
0°-40°	708.1	60.3
0°-60°	1027.9	87.6
0°-90°	1173.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1173.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	695	708	704	711	718	65
15°	599	615	622	647	664	168
25°	472	488	500	522	551	216
35°	334	351	366	398	432	208
45°	194	218	250	272	294	152
55°	123	136	149	149	148	110
65°	75	89	87	82	83	75
75°	40	49	45	40	40	42
85°	12	16	15	12	10	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.8	719.8	719.8	719.8	719.8
2.5°	710.6	722.2	714.4	715.2	716.7
5°	695.1	708.2	704.4	710.6	717.5
7.5°	675.7	688.9	690.4	699.7	708.2
10°	652.5	667.2	669.5	683.5	695.8
12.5°	627.0	643.2	646.3	666.4	682.7
15°	599.1	614.6	621.5	647.1	664.1
17.5°	569.7	584.4	595.2	618.4	637.8
20°	538.7	552.7	566.6	587.5	609.2
22.5°	505.4	520.9	534.1	555.0	579.7
25°	472.2	487.6	500.0	522.5	551.1
27.5°	438.1	453.6	466.0	490.0	520.9
30°	403.3	419.5	431.9	459.0	491.5
32.5°	369.2	385.5	399.4	428.0	462.1
35°	334.4	351.4	366.1	397.8	431.9
37.5°	297.2	316.6	335.2	366.9	400.2
40°	261.6	283.3	305.7	335.2	364.6
42.5°	226.0	250.0	277.9	302.6	329.7
45°	193.5	217.5	250.0	271.7	294.1
47.5°	168.0	188.1	222.9	240.7	260.8
50°	150.9	164.9	195.8	209.8	224.5
52.5°	137.0	148.6	170.3	179.6	187.3
55°	123.1	135.5	148.6	149.4	147.8
57.5°	109.1	123.1	130.0	124.6	127.7
60°	97.5	111.5	114.6	109.1	112.2
62.5°	85.1	100.6	100.6	95.2	96.8
65°	75.1	89.0	86.7	82.0	82.8
67.5°	65.0	79.0	75.1	70.4	70.4
70°	55.7	68.9	64.2	59.6	59.6
72.5°	47.2	58.1	55.0	49.5	48.8
75°	39.5	48.8	44.9	40.2	39.5
77.5°	31.7	39.5	36.4	32.5	31.0
80°	24.8	31.7	27.9	24.8	23.2
82.5°	18.6	24.0	20.9	17.8	16.3
85°	12.4	16.3	14.7	11.6	10.1
87.5°	6.2	10.8	9.3	7.7	6.2
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	15.71	17.14	16.07	17.46	17.77	15.95	17.39	16.32	17.70	18.02
	3H	17.23	18.52	17.61	18.85	19.21	17.31	18.60	17.69	18.92	19.29
	4H	17.80	19.00	18.20	19.35	19.73	17.79	19.00	18.19	19.35	19.73
	6H	18.22	19.33	18.63	19.70	20.09	18.14	19.25	18.55	19.62	20.01
	8H	18.37	19.43	18.80	19.82	20.22	18.25	19.30	18.68	19.70	20.10
	12H	18.49	19.50	18.92	19.88	20.31	18.32	19.33	18.75	19.71	20.14
4H	2H	16.28	17.48	16.68	17.83	18.21	16.47	17.68	16.88	18.03	18.41
	3H	18.08	19.08	18.49	19.48	19.88	18.05	19.05	18.46	19.45	19.85
	4H	18.82	19.72	19.26	20.14	20.58	18.64	19.54	19.08	19.96	20.40
	6H	19.41	20.19	19.87	20.63	21.10	19.11	19.89	19.57	20.34	20.80
	8H	19.62	20.35	20.09	20.80	21.26	19.26	19.99	19.73	20.44	20.91
	12H	19.79	20.44	20.27	20.92	21.39	19.37	20.02	19.86	20.50	20.97
8H	4H	19.09	19.82	19.56	20.26	20.73	18.93	19.66	19.40	20.11	20.58
	6H	19.84	20.45	20.34	20.94	21.42	19.53	20.13	20.02	20.62	21.10
	8H	20.17	20.71	20.69	21.22	21.71	19.75	20.29	20.26	20.80	21.29
	12H	20.45	20.93	20.96	21.42	21.99	19.93	20.41	20.44	20.90	21.47
12H	4H	19.10	19.75	19.59	20.23	20.71	18.97	19.62	19.45	20.10	20.57
	6H	19.89	20.43	20.41	20.94	21.43	19.59	20.13	20.11	20.65	21.14
	8H	20.29	20.76	20.80	21.26	21.82	19.88	20.36	20.39	20.85	21.42