

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: P1058074

Luminaire Tested: S122RDRP-S675D927-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D927-X4F0-XX-UDD-WVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

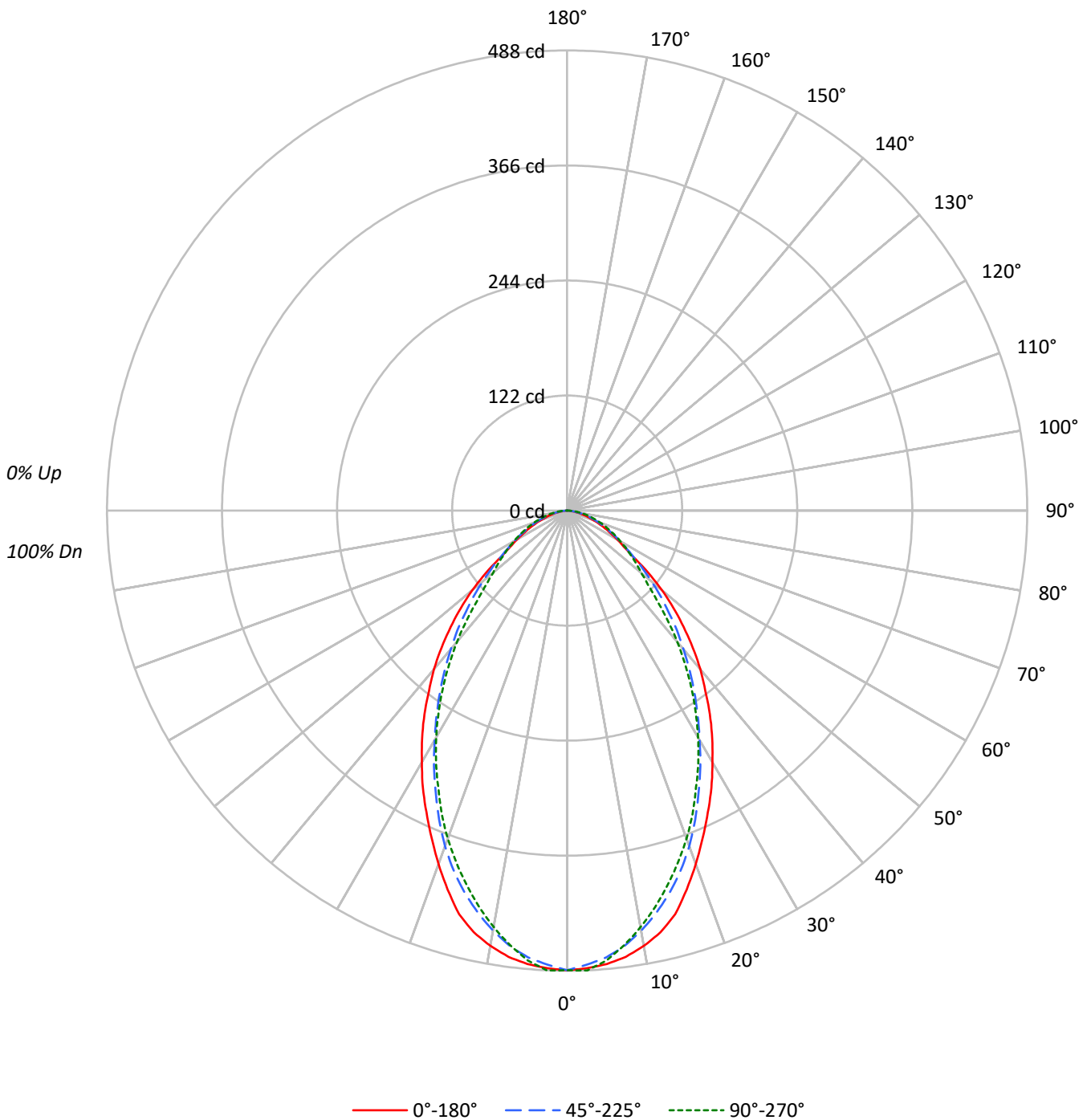
Lumens per Lamp: N/A
Luminaire Lumens: 740.1 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54					54			
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49					49			
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44					44			
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41					41			
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8994	8994	8994
5°	8941	8811	8869
10°	8782	8477	8405
15°	8465	8020	7857
20°	7833	7436	7270
25°	7189	6715	6589
30°	6565	5985	5919
35°	5945	5296	5174
40°	5290	4618	4374
45°	4556	3969	3505
50°	3766	3341	2940
55°	2722	2770	2648
60°	2262	2377	2406
65°	1930	2065	2201
70°	1592	1840	2007
75°	1326	1547	1825
80°	988	1233	1647
85°	339	656	1482

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4556 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	6.1
10°-20°	118.6	16.0
20°-30°	153.5	20.7
30°-40°	150.6	20.3
40°-50°	118.6	16.0
50°-60°	77.7	10.5
60°-70°	47.3	6.4
70°-80°	23.6	3.2
80°-90°	5.1	0.7
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°	317.2	42.9
0°-40°	467.8	63.2
0°-60°	664.1	89.7
0°-90°	740.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	740.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	483	483	476	479	479	46
15°	443	437	420	414	411	123
25°	353	342	330	328	324	162
35°	264	249	235	234	230	165
45°	175	164	152	141	134	135
55°	85	89	86	83	82	80
65°	44	45	47	50	50	44
75°	19	19	22	25	26	20
85°	2	2	3	5	7	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	487.4	487.4	487.4	487.4	487.4
2.5°	485.8	486.6	481.9	486.6	488.1
5°	482.7	482.7	475.7	478.8	478.8
7.5°	477.3	476.5	465.6	465.6	464.8
10°	468.7	465.6	452.4	450.1	448.6
12.5°	457.9	452.4	436.9	433.0	430.7
15°	443.1	436.9	419.8	414.4	411.3
17.5°	421.4	415.2	400.4	394.2	391.1
20°	398.9	389.6	378.7	373.3	370.2
22.5°	375.6	364.7	354.7	350.8	347.7
25°	353.1	341.5	329.8	328.3	323.6
27.5°	331.4	317.4	305.8	305.0	301.1
30°	308.1	293.3	280.9	281.7	277.8
32.5°	286.4	272.4	257.6	258.4	253.8
35°	263.9	249.1	235.1	234.4	229.7
37.5°	240.6	226.6	213.4	210.3	205.7
40°	219.6	205.7	191.7	186.2	181.6
42.5°	197.1	184.7	172.3	163.7	157.5
45°	174.6	163.7	152.1	141.2	134.3
47.5°	152.9	144.3	134.3	121.1	116.4
50°	131.2	124.9	116.4	104.8	102.4
52.5°	108.6	106.3	100.9	93.1	92.3
55°	84.6	89.2	86.1	83.0	82.3
57.5°	71.4	72.2	74.5	73.7	73.7
60°	61.3	61.3	64.4	65.2	65.2
62.5°	52.0	52.8	55.9	57.4	57.4
65°	44.2	45.0	47.3	49.7	50.4
67.5°	36.5	38.0	40.4	42.7	43.5
70°	29.5	31.0	34.1	36.5	37.2
72.5°	24.1	24.8	27.9	30.3	31.0
75°	18.6	19.4	21.7	24.8	25.6
77.5°	13.2	14.7	17.1	19.4	21.0
80°	9.3	10.1	11.6	14.7	15.5
82.5°	5.4	6.2	7.8	10.1	10.9
85°	1.6	2.3	3.1	5.4	7.0
87.5°	0.0	0.0	0.0	1.6	3.1
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	13.76	15.15	14.12	15.47	15.78	13.93	15.33	14.30	15.64	15.96
	3H	14.89	16.13	15.27	16.46	16.82	15.39	16.64	15.77	16.97	17.33
	4H	15.24	16.40	15.64	16.75	17.13	15.93	17.10	16.34	17.45	17.83
	6H	15.42	16.49	15.84	16.86	17.26	16.35	17.42	16.76	17.79	18.18
	8H	15.45	16.47	15.88	16.86	17.26	16.47	17.49	16.90	17.88	18.29
	12H	15.43	16.41	15.87	16.79	17.22	16.56	17.53	16.99	17.91	18.34
4H	2H	14.21	15.38	14.61	15.73	16.11	14.36	15.52	14.76	15.87	16.25
	3H	15.55	16.51	15.96	16.91	17.31	16.03	16.99	16.44	17.39	17.79
	4H	15.99	16.85	16.43	17.27	17.71	16.70	17.55	17.13	17.97	18.41
	6H	16.27	17.01	16.73	17.45	17.92	17.23	17.97	17.69	18.42	18.88
	8H	16.31	17.00	16.78	17.45	17.92	17.40	18.09	17.87	18.54	19.01
	12H	16.30	16.92	16.79	17.40	17.87	17.52	18.14	18.00	18.62	19.09
8H	4H	16.21	16.90	16.67	17.35	17.82	16.84	17.54	17.31	17.98	18.45
	6H	16.55	17.12	17.05	17.62	18.10	17.48	18.04	17.98	18.54	19.02
	8H	16.63	17.14	17.15	17.66	18.15	17.71	18.22	18.23	18.73	19.22
	12H	16.65	17.10	17.16	17.59	18.16	17.89	18.34	18.41	18.84	19.41
12H	4H	16.22	16.83	16.70	17.32	17.79	16.83	17.45	17.31	17.93	18.40
	6H	16.58	17.09	17.10	17.60	18.09	17.47	17.98	17.99	18.49	18.98
	8H	16.69	17.14	17.21	17.64	18.21	17.75	18.20	18.26	18.69	19.26