

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: P1057858

Luminaire Tested: S122RDRP-S1005D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1057858  
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-S1005D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

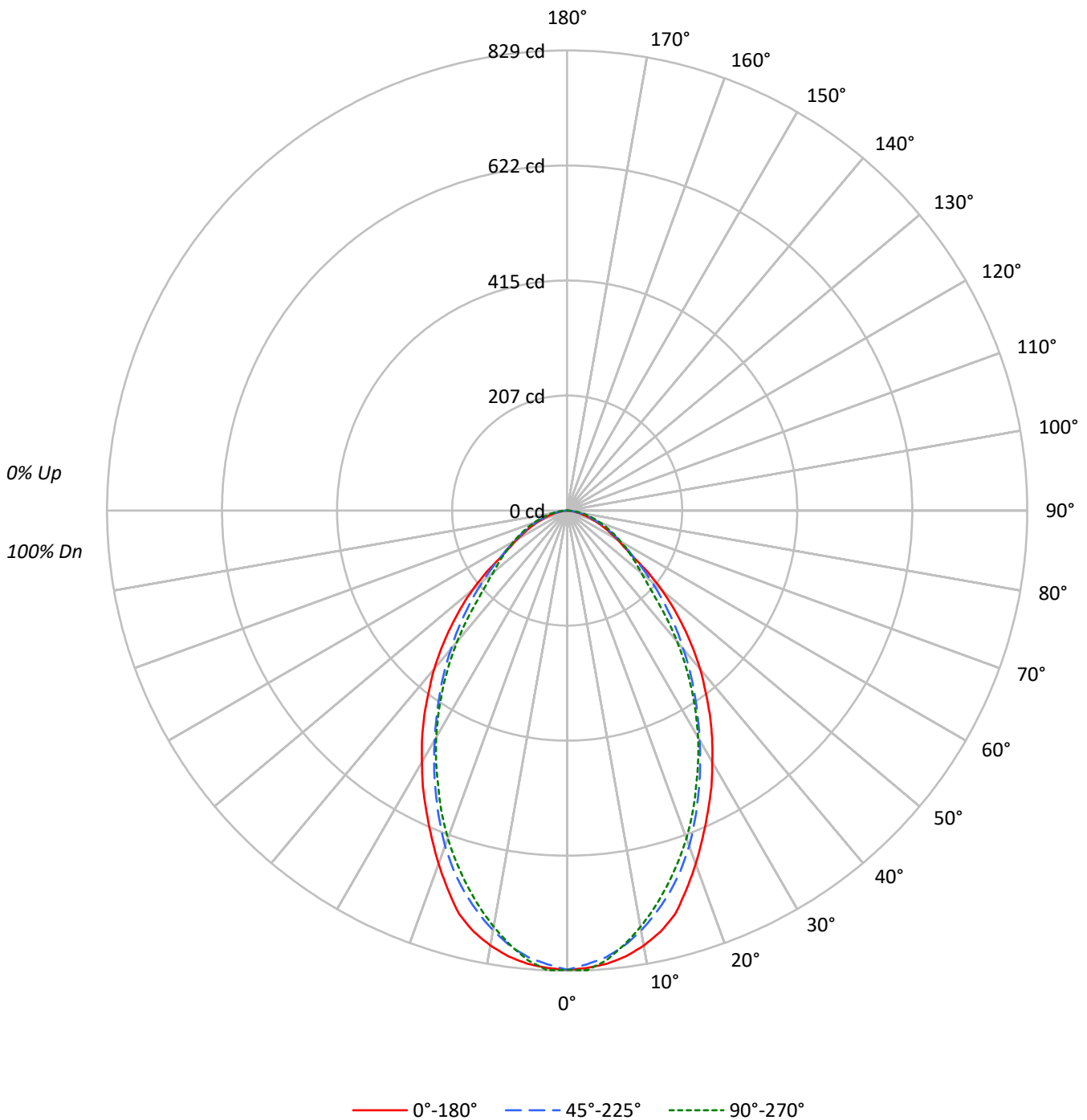
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1256.5 lumens  
Efficiency: N/A  
Efficacy: 30.1 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): 41.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15266	15266	15266
5°	15178	14959	15057
10°	14909	14392	14268
15°	14371	13615	13338
20°	13298	12624	12340
25°	12204	11400	11186
30°	11144	10161	10048
35°	10090	8993	8785
40°	8980	7838	7426
45°	7735	6738	5947
50°	6390	5672	4992
55°	4620	4703	4491
60°	3842	4034	4085
65°	3279	3510	3737
70°	2703	3129	3410
75°	2253	2631	3101
80°	1679	2104	2795
85°	550	1122	2519

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7735 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.5	6.1
10°-20°	201.4	16.0
20°-30°	260.7	20.7
30°-40°	255.6	20.3
40°-50°	201.3	16.0
50°-60°	131.9	10.5
60°-70°	80.3	6.4
70°-80°	40.1	3.2
80°-90°	8.6	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°	538.5	42.9
0°-40°	794.2	63.2
0°-60°	1127.4	89.7
0°-90°	1256.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1256.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	819	819	808	813	813	77
15°	752	742	713	704	698	210
25°	599	580	560	557	549	276
35°	448	423	399	398	390	279
45°	296	278	258	240	228	228
55°	144	152	146	141	140	136
65°	75	76	80	84	86	75
75°	32	33	37	42	44	34
85°	3	4	5	9	12	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	827.3	827.3	827.3	827.3	827.3
2.5°	824.7	826.0	818.1	826.0	828.7
5°	819.4	819.4	807.6	812.9	812.9
7.5°	810.2	808.9	790.5	790.5	789.1
10°	795.7	790.5	768.1	764.1	761.5
12.5°	777.3	768.1	741.7	735.1	731.2
15°	752.3	741.7	712.7	703.5	698.2
17.5°	715.4	704.8	679.8	669.3	664.0
20°	677.2	661.4	642.9	633.7	628.4
22.5°	637.6	619.2	602.1	595.5	590.2
25°	599.4	579.7	559.9	557.3	549.4
27.5°	562.5	538.8	519.1	517.8	511.2
30°	523.0	498.0	476.9	478.2	471.6
32.5°	486.1	462.4	437.4	438.7	430.8
35°	447.9	422.9	399.2	397.9	390.0
37.5°	408.4	384.7	362.3	357.0	349.1
40°	372.8	349.1	325.4	316.2	308.3
42.5°	334.6	313.5	292.5	278.0	267.4
45°	296.4	278.0	258.2	239.8	227.9
47.5°	259.5	245.0	227.9	205.5	197.6
50°	222.6	212.1	197.6	177.9	173.9
52.5°	184.4	180.5	171.3	158.1	156.8
55°	143.6	151.5	146.2	141.0	139.6
57.5°	121.2	122.5	126.5	125.2	125.2
60°	104.1	104.1	109.3	110.7	110.7
62.5°	88.3	89.6	94.9	97.5	97.5
65°	75.1	76.4	80.4	84.3	85.6
67.5°	61.9	64.6	68.5	72.5	73.8
70°	50.1	52.7	58.0	61.9	63.2
72.5°	40.8	42.2	47.4	51.4	52.7
75°	31.6	32.9	36.9	42.2	43.5
77.5°	22.4	25.0	29.0	32.9	35.6
80°	15.8	17.1	19.8	25.0	26.3
82.5°	9.2	10.5	13.2	17.1	18.4
85°	2.6	4.0	5.3	9.2	11.9
87.5°	0.0	0.0	0.0	2.6	5.3
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	15.59	16.99	15.96	17.30	17.62	15.77	17.17	16.14	17.48	17.80
	3H	16.72	17.97	17.10	18.30	18.66	17.23	18.48	17.61	18.81	19.17
	4H	17.08	18.24	17.48	18.59	18.97	17.78	18.94	18.18	19.29	19.67
	6H	17.26	18.33	17.67	18.70	19.09	18.19	19.26	18.60	19.63	20.02
	8H	17.29	18.30	17.72	18.69	19.10	18.31	19.33	18.74	19.72	20.12
	12H	17.27	18.24	17.70	18.63	19.06	18.40	19.37	18.83	19.75	20.18
4H	2H	16.05	17.21	16.45	17.56	17.94	16.20	17.36	16.60	17.71	18.10
	3H	17.39	18.35	17.80	18.75	19.15	17.87	18.83	18.28	19.23	19.63
	4H	17.83	18.69	18.27	19.11	19.55	18.54	19.40	18.97	19.81	20.26
	6H	18.10	18.85	18.57	19.29	19.76	19.07	19.81	19.53	20.26	20.72
	8H	18.15	18.84	18.62	19.29	19.76	19.24	19.93	19.71	20.38	20.85
	12H	18.14	18.76	18.63	19.24	19.71	19.36	19.98	19.84	20.46	20.93
8H	4H	18.05	18.74	18.51	19.19	19.66	18.69	19.38	19.15	19.83	20.30
	6H	18.39	18.96	18.89	19.46	19.94	19.32	19.89	19.82	20.38	20.86
	8H	18.47	18.98	18.99	19.49	19.99	19.55	20.06	20.07	20.57	21.06
	12H	18.49	18.94	19.00	19.43	20.00	19.73	20.18	20.25	20.68	21.25
12H	4H	18.06	18.67	18.54	19.16	19.63	18.67	19.29	19.16	19.77	20.24
	6H	18.42	18.93	18.94	19.44	19.93	19.31	19.82	19.83	20.33	20.83
	8H	18.53	18.98	19.05	19.48	20.05	19.59	20.04	20.10	20.53	21.10