

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: P1060371

Luminaire Tested: S124RDRP-S1195D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060371  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S1195D940-X4F0-XX-UDD-WVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

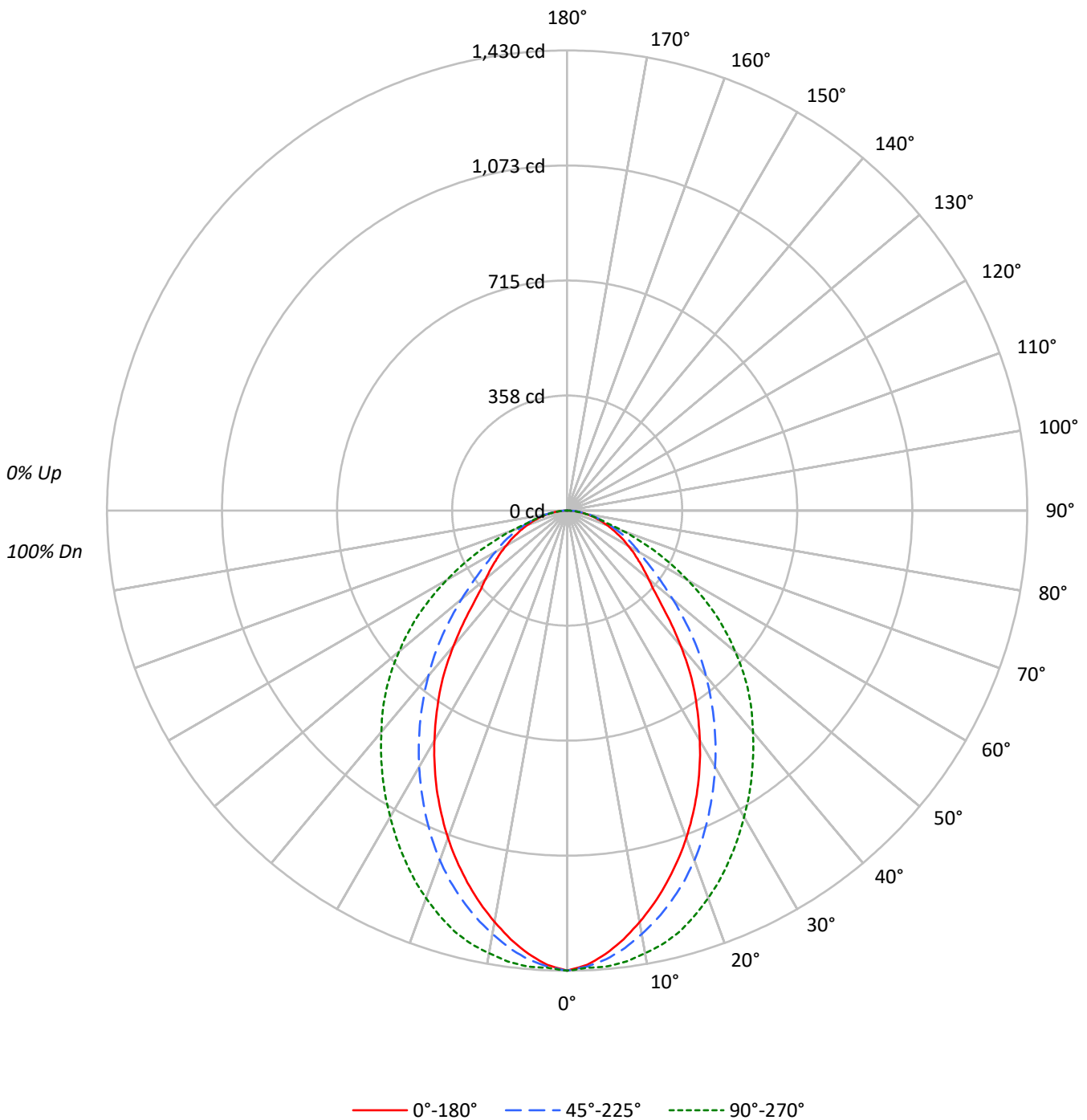
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2623.4 lumens  
Efficiency: N/A  
Efficacy: 62.8 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11  
Luminous Opening: Rectangular (W 0.31' 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	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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75					75			
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65					65			
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57					57			
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50					50			
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45					45			
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40					40			
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37					37			
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33					33			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31					31			

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

	0°	45°	90°
0°	12311	12311	12311
5°	11954	12096	12293
10°	11351	11683	12214
15°	10670	11189	12069
20°	9924	10597	11745
25°	9100	9894	11360
30°	8202	9146	10933
35°	7262	8366	10521
40°	6172	7552	10098
45°	5054	6671	9707
50°	4424	5728	9136
55°	4066	4939	8452
60°	3770	4445	7452
65°	3531	4177	6239
70°	3313	3822	4683
75°	3114	3493	3410
80°	2886	3199	2886
85°	2628	3122	2500

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 9707 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.1	5.0
10°-20°	355.5	13.6
20°-30°	485.9	18.5
30°-40°	510.7	19.5
40°-50°	443.2	16.9
50°-60°	334.3	12.7
60°-70°	216.7	8.3
70°-80°	111.2	4.2
80°-90°	33.7	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°	973.6	37.1
0°-40°	1484.3	56.6
0°-60°	2261.8	86.2
0°-90°	2623.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2623.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1383	1402	1399	1411	1422	129
15°	1197	1226	1255	1312	1354	336
25°	958	992	1041	1121	1196	439
35°	691	729	796	902	1001	430
45°	415	454	548	684	797	327
55°	271	278	329	467	563	244
65°	173	177	205	248	306	173
75°	94	105	105	106	102	99
85°	27	33	32	30	25	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1429.7	1429.7	1429.7	1429.7	1429.7
2.5°	1413.2	1431.0	1418.3	1420.8	1422.1
5°	1382.9	1401.9	1399.3	1410.7	1422.1
7.5°	1343.7	1366.4	1371.5	1394.3	1413.2
10°	1298.1	1323.4	1336.1	1372.8	1396.8
12.5°	1250.0	1275.3	1298.1	1344.9	1379.1
15°	1196.9	1226.0	1255.1	1312.0	1353.8
17.5°	1141.2	1171.6	1208.3	1270.3	1319.6
20°	1083.0	1113.4	1156.4	1223.5	1281.7
22.5°	1021.0	1055.2	1100.7	1172.9	1241.2
25°	957.8	991.9	1041.3	1121.0	1195.6
27.5°	892.0	927.4	980.5	1069.1	1148.8
30°	824.9	862.9	919.8	1013.4	1099.5
32.5°	756.6	797.1	857.8	957.8	1051.4
35°	690.8	728.8	795.8	902.1	1000.8
37.5°	622.5	660.4	732.6	847.7	950.2
40°	549.1	590.9	671.8	790.8	898.3
42.5°	480.8	522.5	609.8	736.4	849.0
45°	415.0	454.2	547.8	684.5	797.1
47.5°	364.4	392.2	485.8	633.9	741.4
50°	330.2	342.9	427.6	578.2	682.0
52.5°	299.9	310.0	374.5	522.5	623.8
55°	270.8	278.3	329.0	466.9	563.0
57.5°	245.5	249.2	288.5	411.2	497.2
60°	218.9	223.9	258.1	354.3	432.7
62.5°	197.4	199.9	231.5	299.9	368.2
65°	173.3	177.1	205.0	248.0	306.2
67.5°	151.8	158.2	177.1	202.4	241.7
70°	131.6	140.4	151.8	164.5	186.0
72.5°	112.6	122.7	129.1	134.1	130.3
75°	93.6	105.0	105.0	106.3	102.5
77.5°	75.9	86.0	84.8	83.5	78.4
80°	58.2	67.1	64.5	63.3	58.2
82.5°	43.0	49.3	46.8	45.5	39.2
85°	26.6	32.9	31.6	30.4	25.3
87.5°	12.7	19.0	17.7	16.4	11.4
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	15.22	16.71	15.59	17.02	17.34	18.96	20.45	19.33	20.76	21.08
	3H	16.89	18.22	17.27	18.55	18.92	20.09	21.42	20.47	21.75	22.11
	4H	17.56	18.81	17.96	19.16	19.54	20.39	21.63	20.79	21.98	22.36
	6H	18.07	19.22	18.48	19.59	19.98	20.59	21.74	21.00	22.11	22.50
	8H	18.24	19.34	18.67	19.73	20.13	20.64	21.74	21.07	22.13	22.53
	12H	18.36	19.41	18.79	19.79	20.22	20.67	21.72	21.10	22.11	22.53
4H	2H	16.02	17.27	16.42	17.61	17.99	19.13	20.38	19.53	20.73	21.11
	3H	17.89	18.92	18.30	19.32	19.73	20.46	21.50	20.87	21.90	22.30
	4H	18.69	19.62	19.13	20.04	20.48	20.88	21.81	21.31	22.22	22.66
	6H	19.34	20.15	19.79	20.59	21.05	21.20	22.01	21.66	22.45	22.91
	8H	19.56	20.32	20.02	20.76	21.23	21.29	22.05	21.76	22.49	22.96
	12H	19.72	20.40	20.21	20.88	21.35	21.36	22.04	21.85	22.52	22.99
8H	4H	19.04	19.80	19.51	20.24	20.71	21.01	21.77	21.47	22.21	22.68
	6H	19.83	20.46	20.33	20.95	21.43	21.43	22.05	21.93	22.55	23.02
	8H	20.15	20.71	20.66	21.22	21.71	21.59	22.15	22.10	22.66	23.15
	12H	20.41	20.91	20.92	21.40	21.97	21.72	22.22	22.23	22.71	23.28
12H	4H	19.07	19.75	19.55	20.23	20.70	21.01	21.69	21.50	22.17	22.64
	6H	19.89	20.45	20.41	20.96	21.45	21.45	22.01	21.96	22.52	23.01
	8H	20.28	20.77	20.79	21.27	21.83	21.66	22.16	22.17	22.65	23.21