

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: P1060317

Luminaire Tested: S124RDRP-S1195D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060317  
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-S1195D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

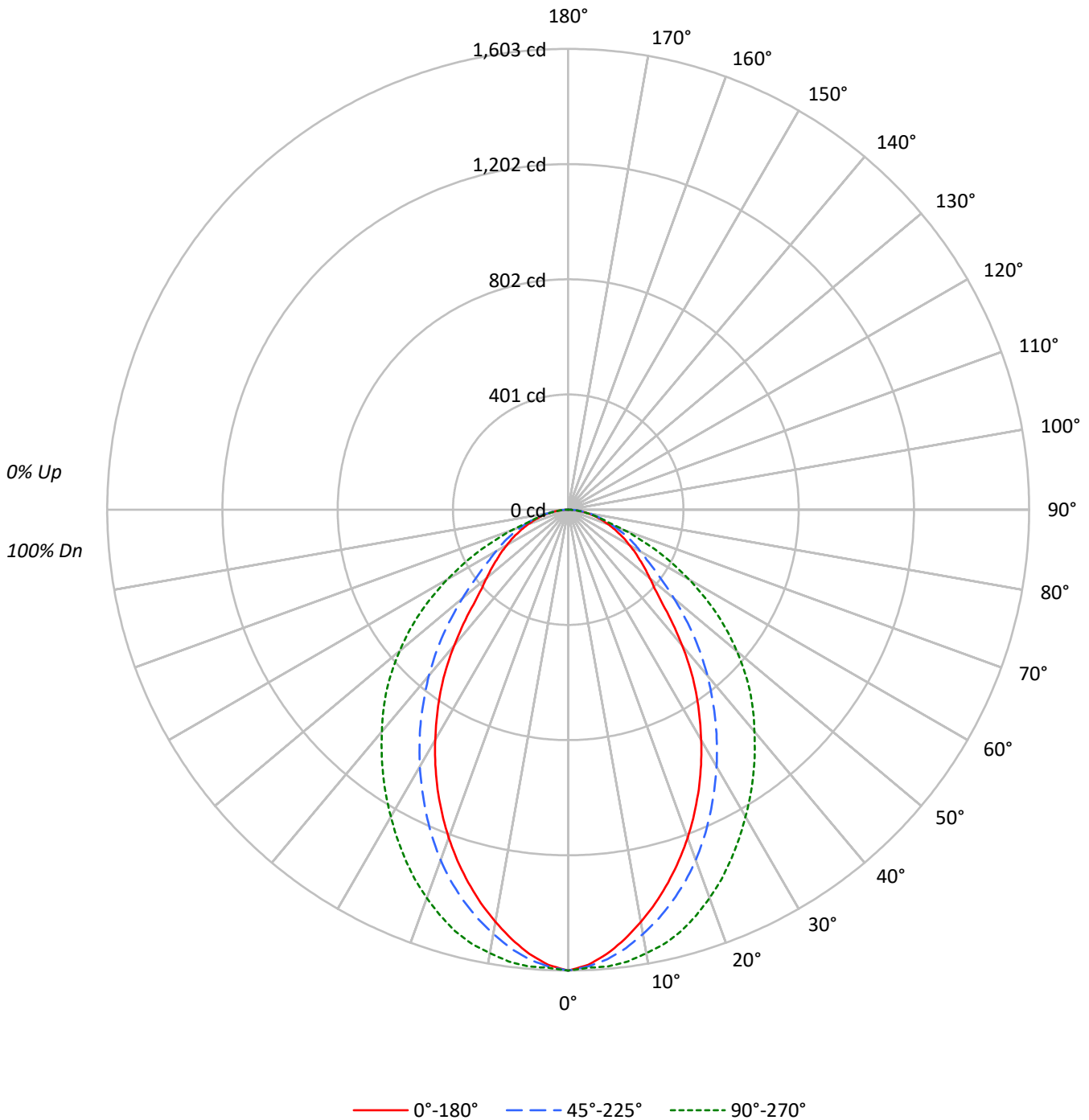
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2942.0 lumens  
Efficiency: N/A  
Efficacy: 70.4 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	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	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																												
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																												
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65																												
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57																												
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50																												
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40																												
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37																												
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31																												

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

	0°	45°	90°
0°	13806	13806	13806
5°	13405	13565	13785
10°	12729	13101	13697
15°	11966	12548	13535
20°	11129	11884	13171
25°	10205	11095	12739
30°	9199	10256	12260
35°	8144	9382	11798
40°	6922	8469	11324
45°	5668	7482	10886
50°	4961	6425	10246
55°	4558	5538	9479
60°	4228	4984	8358
65°	3961	4684	6997
70°	3716	4288	5252
75°	3493	3919	3823
80°	3238	3590	3238
85°	2944	3507	2806

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 10886 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.2	5.0
10°-20°	398.7	13.6
20°-30°	544.9	18.5
30°-40°	572.7	19.5
40°-50°	497.0	16.9
50°-60°	374.9	12.7
60°-70°	243.0	8.3
70°-80°	124.7	4.2
80°-90°	37.8	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°	1091.8	37.1
0°-40°	1664.5	56.6
0°-60°	2536.4	86.2
0°-90°	2942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2942.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1603	1603	1603	1603	1603	
5°	1551	1572	1569	1582	1595	145
15°	1342	1375	1408	1471	1518	376
25°	1074	1112	1168	1257	1341	492
35°	775	817	892	1012	1122	482
45°	465	509	614	768	894	366
55°	304	312	369	524	631	273
65°	194	199	230	278	343	194
75°	105	118	118	119	115	112
85°	30	37	36	34	28	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1603.3	1603.3	1603.3	1603.3	1603.3
2.5°	1584.9	1604.7	1590.5	1593.4	1594.8
5°	1550.8	1572.1	1569.3	1582.0	1594.8
7.5°	1506.8	1532.4	1538.1	1563.6	1584.9
10°	1455.8	1484.1	1498.3	1539.5	1566.4
12.5°	1401.8	1430.2	1455.8	1508.3	1546.6
15°	1342.2	1374.9	1407.5	1471.4	1518.2
17.5°	1279.8	1313.9	1355.0	1424.5	1479.9
20°	1214.5	1248.6	1296.8	1372.0	1437.3
22.5°	1145.0	1183.3	1234.4	1315.3	1391.9
25°	1074.1	1112.4	1167.7	1257.1	1340.8
27.5°	1000.3	1040.0	1099.6	1198.9	1288.3
30°	925.1	967.7	1031.5	1136.5	1233.0
32.5°	848.5	893.9	962.0	1074.1	1179.1
35°	774.7	817.3	892.5	1011.7	1122.3
37.5°	698.1	740.6	821.5	950.6	1065.6
40°	615.8	662.6	753.4	886.8	1007.4
42.5°	539.2	586.0	683.9	825.8	952.1
45°	465.4	509.4	614.4	767.6	893.9
47.5°	408.6	439.8	544.8	710.9	831.5
50°	370.3	384.5	479.6	648.4	764.8
52.5°	336.3	347.6	420.0	586.0	699.5
55°	303.6	312.2	368.9	523.6	631.4
57.5°	275.3	279.5	323.5	461.1	557.6
60°	245.5	251.1	289.4	397.3	485.3
62.5°	221.3	224.2	259.7	336.3	412.9
65°	194.4	198.6	229.9	278.1	343.4
67.5°	170.3	177.4	198.6	227.0	271.0
70°	147.6	157.5	170.3	184.5	208.6
72.5°	126.3	137.6	144.7	150.4	146.1
75°	105.0	117.8	117.8	119.2	114.9
77.5°	85.1	96.5	95.1	93.6	88.0
80°	65.3	75.2	72.4	70.9	65.3
82.5°	48.2	55.3	52.5	51.1	44.0
85°	29.8	36.9	35.5	34.1	28.4
87.5°	14.2	21.3	19.9	18.4	12.8
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	15.62	17.11	15.99	17.42	17.74	19.36	20.85	19.73	21.16	21.48
	3H	17.29	18.62	17.67	18.95	19.31	20.49	21.82	20.87	22.15	22.51
	4H	17.96	19.21	18.36	19.56	19.94	20.78	22.03	21.18	22.38	22.76
	6H	18.47	19.62	18.88	19.99	20.38	20.98	22.14	21.40	22.50	22.90
	8H	18.64	19.74	19.07	20.13	20.53	21.04	22.14	21.46	22.53	22.93
	12H	18.76	19.81	19.19	20.19	20.62	21.07	22.12	21.50	22.50	22.93
4H	2H	16.42	17.66	16.82	18.01	18.39	19.53	20.78	19.93	21.12	21.50
	3H	18.29	19.32	18.70	19.72	20.13	20.86	21.89	21.27	22.29	22.70
	4H	19.09	20.02	19.53	20.44	20.88	21.27	22.21	21.71	22.62	23.06
	6H	19.74	20.55	20.19	20.99	21.45	21.60	22.41	22.05	22.85	23.31
	8H	19.96	20.72	20.42	21.16	21.63	21.69	22.45	22.15	22.89	23.36
	12H	20.12	20.80	20.61	21.28	21.75	21.76	22.44	22.24	22.92	23.39
8H	4H	19.44	20.20	19.90	20.64	21.11	21.41	22.16	21.87	22.61	23.08
	6H	20.23	20.86	20.73	21.35	21.83	21.83	22.45	22.32	22.94	23.42
	8H	20.55	21.11	21.06	21.62	22.11	21.98	22.54	22.50	23.06	23.54
	12H	20.81	21.31	21.32	21.80	22.37	22.12	22.62	22.63	23.11	23.68
12H	4H	19.47	20.15	19.95	20.63	21.10	21.41	22.09	21.89	22.57	23.04
	6H	20.29	20.85	20.81	21.36	21.85	21.85	22.41	22.36	22.92	23.41
	8H	20.68	21.17	21.19	21.67	22.23	22.06	22.55	22.57	23.05	23.61