

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: P1060613

Luminaire Tested: S124RDRP-S795D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

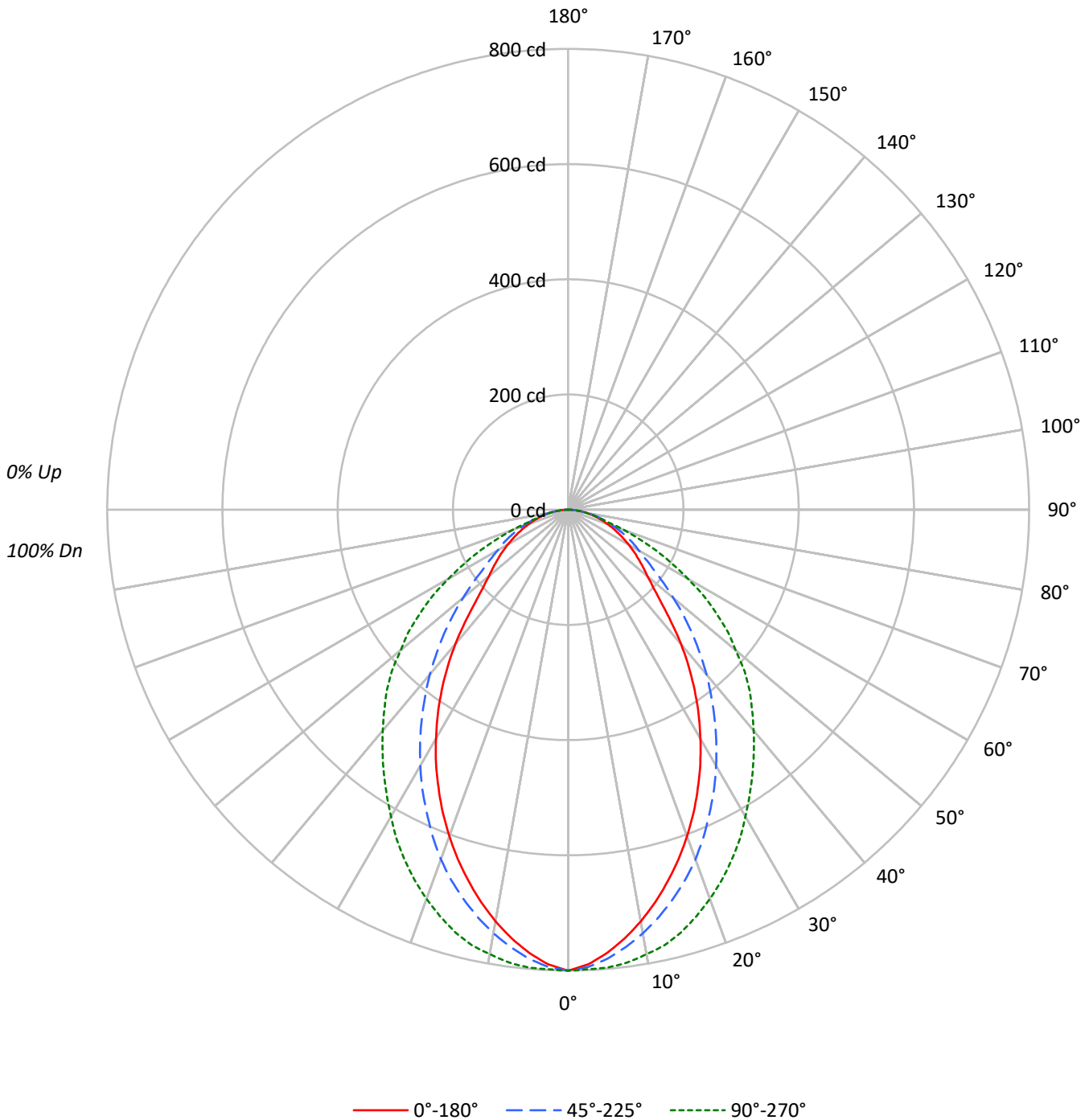
Lumens per Lamp: N/A
Luminaire Lumens: 1456.9 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75													75															
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65													65															
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57													57															
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50													50															
6	75	62	54	48	73	62	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	54	47	43	52	47	42	41													41															
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37													37															
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34													34															
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31													31															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6891	6891	6891
5°	6678	6765	6895
10°	6345	6527	6851
15°	5952	6244	6767
20°	5527	5919	6588
25°	5060	5516	6376
30°	4562	5105	6114
35°	4021	4656	5864
40°	3423	4196	5630
45°	2779	3708	5424
50°	2405	3191	5079
55°	2229	2707	4710
60°	2080	2442	4132
65°	1948	2290	3435
70°	1815	2112	2598
75°	1730	1953	1870
80°	1622	1790	1582
85°	1492	1660	1245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5424 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	5.1
10°-20°	198.6	13.6
20°-30°	271.2	18.6
30°-40°	284.1	19.5
40°-50°	245.9	16.9
50°-60°	184.8	12.7
60°-70°	119.1	8.2
70°-80°	61.1	4.2
80°-90°	18.2	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°	543.6	37.3
0°-40°	827.7	56.8
0°-60°	1258.4	86.4
0°-90°	1456.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	772	784	783	788	798	72
15°	668	684	700	732	759	187
25°	533	553	580	626	671	244
35°	382	404	443	502	558	238
45°	228	252	304	379	445	180
55°	148	154	180	258	314	133
65°	96	97	112	136	169	95
75°	52	58	59	58	56	55
85°	15	18	17	16	13	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	800.2	800.2	800.2	800.2	800.2
2.5°	790.2	800.2	794.4	796.0	798.6
5°	772.5	784.3	782.6	788.5	797.7
7.5°	750.7	763.3	765.8	779.3	792.7
10°	725.6	739.8	746.5	766.7	783.5
12.5°	697.9	713.0	724.7	749.9	774.2
15°	667.7	684.5	700.4	732.3	759.1
17.5°	636.7	653.4	674.4	709.6	739.8
20°	603.1	621.6	645.9	682.8	718.9
22.5°	568.7	588.0	614.0	654.3	696.2
25°	532.6	552.8	580.5	625.8	671.1
27.5°	496.6	516.7	547.7	595.6	645.0
30°	458.8	479.8	513.4	565.4	614.9
32.5°	421.1	443.7	478.1	533.5	586.3
35°	382.5	404.3	442.9	501.6	557.8
37.5°	343.9	366.6	407.7	470.6	529.3
40°	304.5	328.0	373.3	439.5	500.8
42.5°	265.1	290.2	338.0	407.7	472.3
45°	228.2	251.6	304.5	379.1	445.4
47.5°	200.5	216.4	270.9	351.5	415.2
50°	179.5	187.9	238.2	321.3	379.1
52.5°	163.6	169.4	208.0	288.6	349.8
55°	148.5	153.5	180.3	257.5	313.7
57.5°	135.0	137.6	159.4	227.3	279.3
60°	120.8	123.3	141.8	194.6	239.9
62.5°	108.2	109.9	127.5	163.6	203.8
65°	95.6	97.3	112.4	135.9	168.6
67.5°	83.9	86.4	98.1	110.7	134.2
70°	72.1	77.2	83.9	89.8	103.2
72.5°	62.1	67.1	70.5	72.1	73.0
75°	52.0	57.9	58.7	57.9	56.2
77.5°	41.9	47.0	47.0	45.3	43.6
80°	32.7	36.9	36.1	34.4	31.9
82.5°	24.3	26.8	26.0	24.3	21.8
85°	15.1	17.6	16.8	15.9	12.6
87.5°	7.5	10.1	9.2	8.4	5.0
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	13.14	14.62	13.50	14.94	15.25	16.91	18.40	17.28	18.71	19.02
	3H	14.79	16.12	15.17	16.45	16.81	18.03	19.35	18.40	19.68	20.05
	4H	15.46	16.71	15.86	17.06	17.44	18.32	19.56	18.72	19.91	20.29
	6H	15.98	17.13	16.39	17.49	17.89	18.51	19.66	18.93	20.03	20.42
	8H	16.16	17.25	16.59	17.64	18.04	18.57	19.66	18.99	20.05	20.45
	12H	16.28	17.33	16.71	17.71	18.14	18.59	19.64	19.02	20.02	20.45
4H	2H	13.92	15.17	14.32	15.52	15.90	17.07	18.32	17.47	18.66	19.04
	3H	15.78	16.82	16.19	17.22	17.62	18.38	19.42	18.79	19.82	20.22
	4H	16.59	17.52	17.03	17.94	18.38	18.79	19.72	19.22	20.14	20.58
	6H	17.24	18.05	17.70	18.49	18.95	19.11	19.91	19.56	20.36	20.82
	8H	17.47	18.22	17.93	18.67	19.13	19.20	19.95	19.66	20.40	20.87
	12H	17.64	18.31	18.12	18.79	19.26	19.26	19.93	19.74	20.41	20.88
8H	4H	16.94	17.70	17.41	18.14	18.61	18.92	19.68	19.39	20.12	20.59
	6H	17.73	18.36	18.23	18.85	19.33	19.34	19.96	19.83	20.45	20.93
	8H	18.05	18.61	18.57	19.12	19.61	19.49	20.05	20.00	20.56	21.05
	12H	18.32	18.81	18.83	19.31	19.87	19.61	20.10	20.12	20.60	21.16
12H	4H	16.97	17.64	17.45	18.12	18.60	18.93	19.60	19.41	20.08	20.55
	6H	17.80	18.36	18.31	18.87	19.36	19.36	19.92	19.87	20.43	20.92
	8H	18.18	18.68	18.69	19.17	19.74	19.56	20.05	20.07	20.55	21.11