

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060784

Luminaire Tested: S124RDR-H1195D950-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060784
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: S124RDR-H1195D950-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

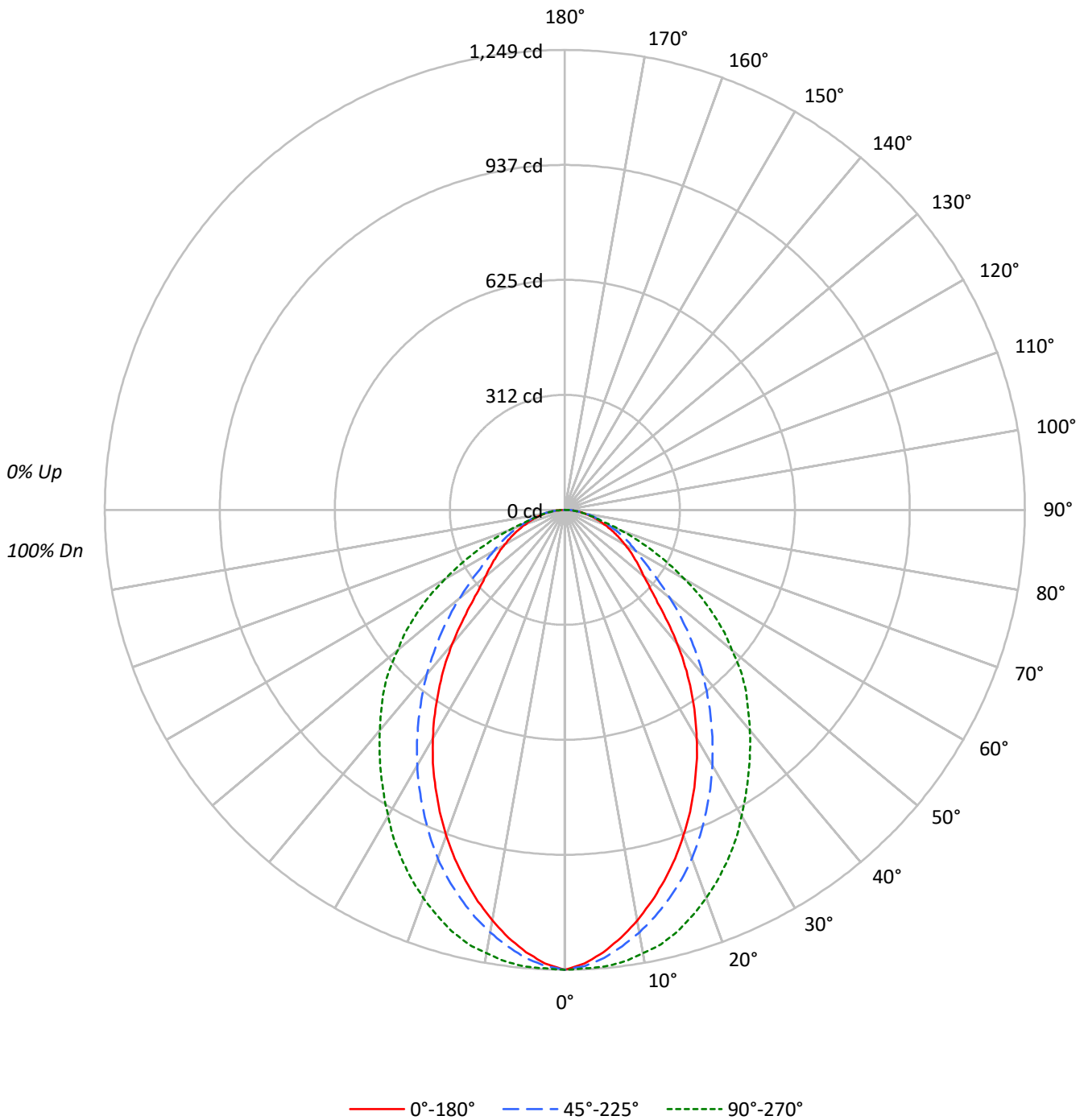
Lumens per Lamp: N/A
Luminaire Lumens: 2273.9 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): 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										
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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75	75	75	75	75	75	75														
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65	65	65	65	65	65	65														
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57	57	57	57	57	57	57														
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50	50	50	50	50	50	50														
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45	45	45	45	45	45	45														
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41	41	41	41	41	41	41														
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37	37	37	37	37	37	37														
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34	34	34	34	34	34	34														
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31	31	31	31	31	31	31														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10755	10755	10755
5°	10423	10559	10763
10°	9903	10188	10692
15°	9290	9746	10562
20°	8626	9238	10282
25°	7899	8608	9952
30°	7120	7967	9543
35°	6276	7267	9152
40°	5342	6549	8786
45°	4337	5787	8466
50°	3754	4981	7928
55°	3479	4226	7350
60°	3246	3811	6448
65°	3042	3574	5363
70°	2835	3296	4054
75°	2702	3048	2918
80°	2534	2792	2470
85°	2332	2589	1937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8466 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	5.1
10°-20°	309.9	13.6
20°-30°	423.2	18.6
30°-40°	443.4	19.5
40°-50°	383.8	16.9
50°-60°	288.4	12.7
60°-70°	186.0	8.2
70°-80°	95.4	4.2
80°-90°	28.5	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°	848.5	37.3
0°-40°	1291.9	56.8
0°-60°	1964.1	86.4
0°-90°	2273.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2273.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1249	1249	1249	1249	1249	
5°	1206	1224	1222	1231	1245	113
15°	1042	1068	1093	1143	1185	292
25°	831	863	906	977	1047	381
35°	597	631	691	783	871	372
45°	356	393	475	592	695	281
55°	232	240	282	402	490	208
65°	149	152	175	212	263	148
75°	81	90	92	90	88	86
85°	24	28	26	25	20	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1249.0	1249.0	1249.0	1249.0	1249.0
2.5°	1233.3	1249.0	1239.8	1242.4	1246.4
5°	1205.8	1224.1	1221.5	1230.7	1245.1
7.5°	1171.7	1191.4	1195.3	1216.3	1237.2
10°	1132.5	1154.7	1165.2	1196.6	1222.8
12.5°	1089.3	1112.8	1131.2	1170.4	1208.4
15°	1042.1	1068.3	1093.2	1142.9	1184.8
17.5°	993.7	1019.9	1052.6	1107.6	1154.7
20°	941.3	970.1	1008.1	1065.7	1122.0
22.5°	887.6	917.8	958.3	1021.2	1086.6
25°	831.4	862.8	906.0	976.7	1047.4
27.5°	775.1	806.5	854.9	929.5	1006.8
30°	716.1	748.9	801.2	882.4	959.7
32.5°	657.2	692.6	746.3	832.7	915.1
35°	597.0	631.0	691.3	782.9	870.6
37.5°	536.8	572.1	636.3	734.5	826.1
40°	475.2	511.9	582.6	686.0	781.6
42.5°	413.7	453.0	527.6	636.3	737.1
45°	356.1	392.8	475.2	591.8	695.2
47.5°	312.9	337.8	422.9	548.6	648.1
50°	280.2	293.3	371.8	501.4	591.8
52.5°	255.3	264.5	324.7	450.4	545.9
55°	231.7	239.6	281.5	401.9	489.6
57.5°	210.8	214.7	248.8	354.8	436.0
60°	188.5	192.5	221.3	303.7	374.4
62.5°	168.9	171.5	199.0	255.3	318.1
65°	149.3	151.9	175.4	212.1	263.2
67.5°	130.9	134.8	153.2	172.8	209.5
70°	112.6	120.4	130.9	140.1	161.0
72.5°	96.9	104.7	110.0	112.6	113.9
75°	81.2	90.3	91.6	90.3	87.7
77.5°	65.5	73.3	73.3	70.7	68.1
80°	51.1	57.6	56.3	53.7	49.8
82.5°	38.0	41.9	40.6	38.0	34.0
85°	23.6	27.5	26.2	24.9	19.6
87.5°	11.8	15.7	14.4	13.1	7.9
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	14.69	16.17	15.05	16.48	16.80	18.46	19.94	18.82	20.26	20.57
	3H	16.34	17.67	16.72	18.00	18.36	19.57	20.90	19.95	21.23	21.59
	4H	17.01	18.26	17.41	18.60	18.98	19.86	21.11	20.26	21.46	21.84
	6H	17.52	18.67	17.94	19.04	19.43	20.06	21.21	20.47	21.58	21.97
	8H	17.71	18.80	18.13	19.19	19.59	20.11	21.21	20.54	21.60	22.00
	12H	17.83	18.88	18.26	19.26	19.69	20.14	21.19	20.57	21.57	22.00
4H	2H	15.47	16.71	15.87	17.06	17.44	18.62	19.86	19.02	20.21	20.59
	3H	17.33	18.36	17.74	18.76	19.16	19.93	20.96	20.34	21.36	21.76
	4H	18.14	19.07	18.57	19.48	19.92	20.34	21.27	20.77	21.68	22.12
	6H	18.78	19.59	19.24	20.04	20.50	20.65	21.46	21.11	21.90	22.36
	8H	19.01	19.77	19.48	20.21	20.68	20.75	21.50	21.21	21.94	22.41
	12H	19.18	19.86	19.67	20.34	20.81	20.81	21.48	21.29	21.96	22.43
8H	4H	18.49	19.24	18.95	19.69	20.15	20.47	21.22	20.93	21.67	22.14
	6H	19.28	19.90	19.78	20.40	20.87	20.88	21.51	21.38	22.00	22.48
	8H	19.60	20.16	20.12	20.67	21.16	21.03	21.59	21.55	22.10	22.59
	12H	19.87	20.36	20.38	20.85	21.42	21.16	21.65	21.67	22.14	22.71
12H	4H	18.52	19.19	19.00	19.67	20.14	20.47	21.15	20.96	21.63	22.10
	6H	19.34	19.90	19.86	20.41	20.90	20.90	21.46	21.42	21.97	22.46
	8H	19.73	20.22	20.24	20.72	21.28	21.11	21.60	21.62	22.09	22.66