

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: P1060331

Luminaire Tested: S124RDRP-S1195D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

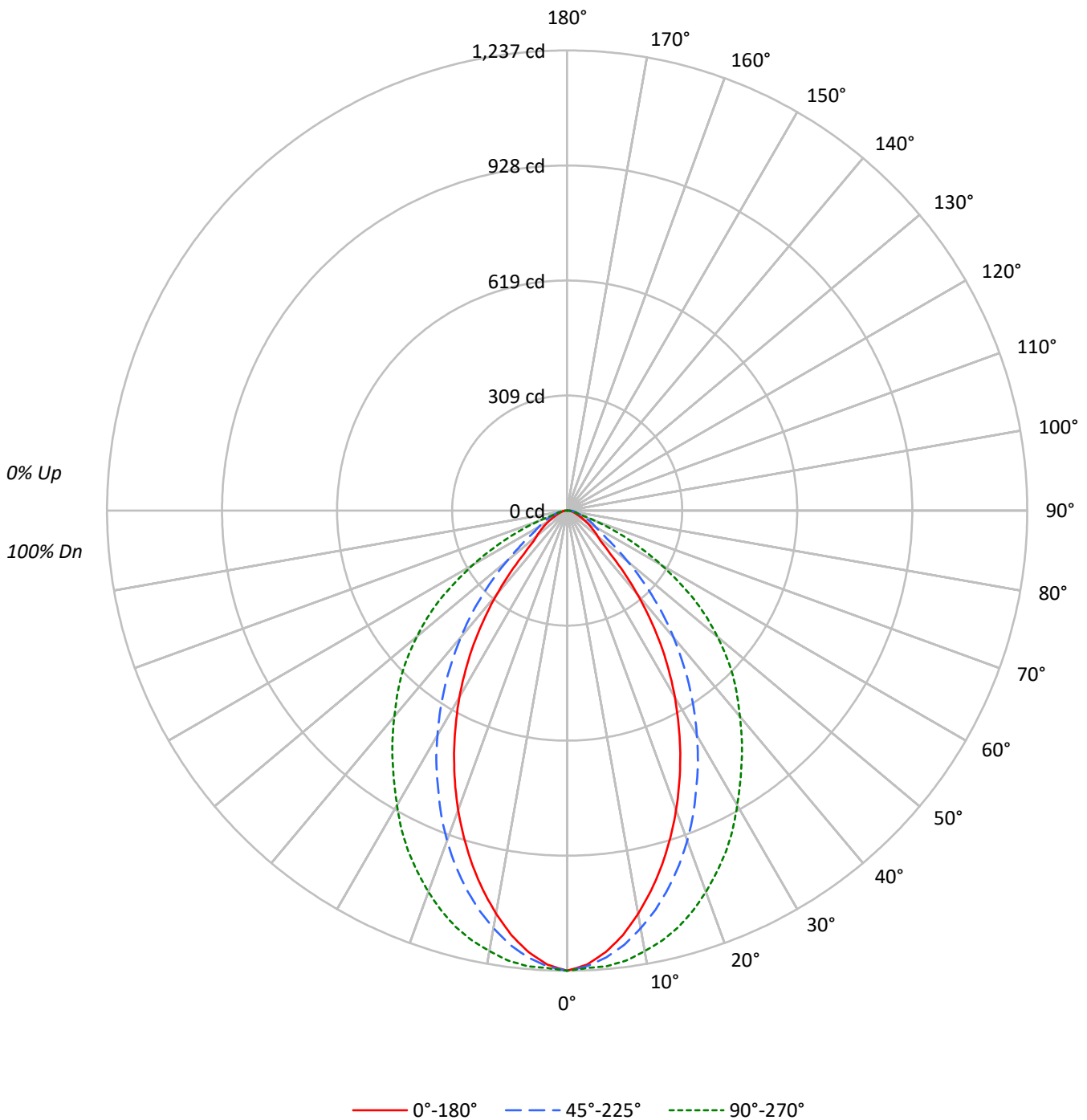
Lumens per Lamp: N/A
Luminaire Lumens: 1739.4 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70			
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63					63			
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10652	10652	10652
5°	10298	10421	10625
10°	9619	9964	10514
15°	8783	9372	10326
20°	7846	8653	9995
25°	6833	7805	9600
30°	5759	6932	9092
35°	4599	6006	8603
40°	3308	4989	8121
45°	1994	3929	7686
50°	1433	2847	7063
55°	1206	1914	6262
60°	977	1517	5041
65°	770	1379	3623
70°	675	1148	1941
75°	629	1048	942
80°	625	1091	858
85°	929	1551	1087

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7686 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	6.5
10°-20°	297.5	17.1
20°-30°	386.1	22.2
30°-40°	371.1	21.3
40°-50°	275.3	15.8
50°-60°	168.7	9.7
60°-70°	81.9	4.7
70°-80°	31.2	1.8
80°-90°	14.0	0.8
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°	797.2	45.8
0°-40°	1168.3	67.2
0°-60°	1612.3	92.7
0°-90°	1739.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1739.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1191	1209	1206	1217	1229	111
15°	985	1014	1051	1114	1158	275
25°	719	755	822	927	1010	329
35°	438	477	571	707	818	271
45°	164	205	323	493	631	136
55°	80	83	128	288	417	72
65°	38	41	68	107	178	39
75°	19	30	32	28	28	20
85°	9	16	16	14	11	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1237.0	1237.0	1237.0	1237.0	1237.0
2.5°	1221.3	1235.5	1226.0	1229.2	1230.7
5°	1191.4	1208.7	1205.6	1216.6	1229.2
7.5°	1150.5	1170.9	1177.2	1199.3	1219.7
10°	1100.1	1125.3	1139.5	1175.7	1202.4
12.5°	1045.0	1071.8	1098.5	1147.3	1183.5
15°	985.2	1013.6	1051.3	1114.3	1158.3
17.5°	922.3	953.7	999.4	1074.9	1126.9
20°	856.2	889.2	944.3	1027.7	1090.7
22.5°	788.5	823.1	884.5	977.4	1051.3
25°	719.2	755.4	821.5	927.0	1010.4
27.5°	648.4	686.2	761.7	873.5	964.8
30°	579.2	615.4	697.2	818.4	914.4
32.5°	508.4	546.1	634.3	761.7	865.6
35°	437.5	476.9	571.3	706.7	818.4
37.5°	365.1	407.6	506.8	653.1	771.2
40°	294.3	335.2	443.8	598.1	722.4
42.5°	225.1	269.1	384.0	543.0	676.8
45°	163.7	204.6	322.6	492.6	631.1
47.5°	122.8	147.9	266.0	445.4	580.7
50°	107.0	111.7	212.5	393.5	527.2
52.5°	92.9	96.0	165.3	336.8	473.7
55°	80.3	83.4	127.5	288.0	417.1
57.5°	67.7	70.8	102.3	240.8	352.5
60°	56.7	59.8	88.1	192.0	292.7
62.5°	47.2	48.8	78.7	146.4	234.5
65°	37.8	40.9	67.7	107.0	177.8
67.5°	31.5	34.6	55.1	74.0	124.3
70°	26.8	34.6	45.6	51.9	77.1
72.5°	22.0	31.5	37.8	36.2	36.2
75°	18.9	29.9	31.5	28.3	28.3
77.5°	15.7	26.8	25.2	23.6	22.0
80°	12.6	22.0	22.0	18.9	17.3
82.5°	11.0	17.3	17.3	17.3	14.2
85°	9.4	15.7	15.7	14.2	11.0
87.5°	6.3	12.6	14.2	12.6	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	8.03	9.37	8.40	9.68	10.00	17.13	18.47	17.50	18.78	19.10
	3H	9.08	10.26	9.46	10.59	10.96	17.63	18.82	18.01	19.15	19.52
	4H	9.59	10.70	9.99	11.05	11.43	17.65	18.75	18.05	19.10	19.49
	6H	10.04	11.06	10.46	11.43	11.82	17.65	18.66	18.06	19.03	19.43
	8H	10.23	11.20	10.66	11.59	11.99	17.64	18.61	18.07	19.00	19.40
	12H	10.44	11.37	10.88	11.75	12.18	17.64	18.56	18.07	18.95	19.38
4H	2H	9.13	10.23	9.53	10.58	10.97	17.02	18.13	17.42	18.48	18.86
	3H	10.40	11.30	10.81	11.71	12.11	17.60	18.50	18.01	18.91	19.31
	4H	11.10	11.91	11.54	12.33	12.77	17.65	18.46	18.08	18.87	19.32
	6H	11.73	12.43	12.20	12.88	13.34	17.70	18.40	18.16	18.84	19.31
	8H	11.98	12.63	12.45	13.08	13.55	17.72	18.37	18.18	18.82	19.29
	12H	12.25	12.83	12.74	13.31	13.79	17.75	18.33	18.23	18.81	19.28
8H	4H	11.53	12.18	12.00	12.63	13.10	17.59	18.25	18.06	18.70	19.17
	6H	12.41	12.94	12.91	13.44	13.92	17.69	18.22	18.19	18.72	19.20
	8H	12.81	13.29	13.33	13.81	14.30	17.75	18.23	18.27	18.75	19.24
	12H	13.29	13.71	13.80	14.21	14.78	17.85	18.27	18.36	18.77	19.34
12H	4H	11.57	12.15	12.06	12.63	13.11	17.57	18.15	18.05	18.63	19.10
	6H	12.52	13.00	13.04	13.51	14.01	17.67	18.15	18.19	18.66	19.16
	8H	13.03	13.46	13.55	13.95	14.53	17.77	18.20	18.29	18.69	19.26