

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: P1060331

Luminaire Tested: S124RDR-S1195D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
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: S124RDR-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

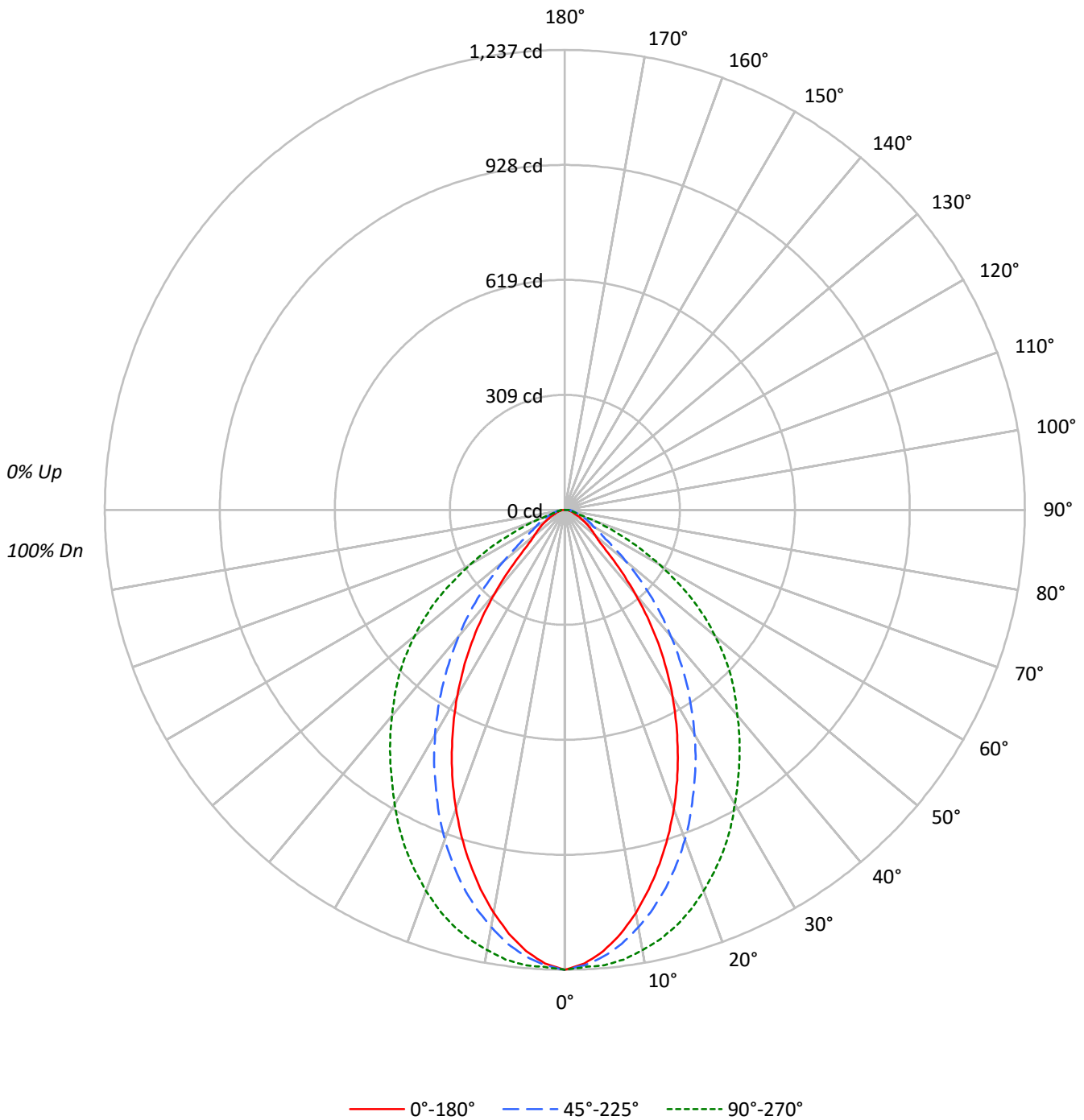
Lumens per Lamp: N/A
Luminaire Lumens: 1739.4 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (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					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	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

(END OF REPORT)