

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: P1060307

Luminaire Tested: S124RDR-S1195D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060307
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-S1195D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

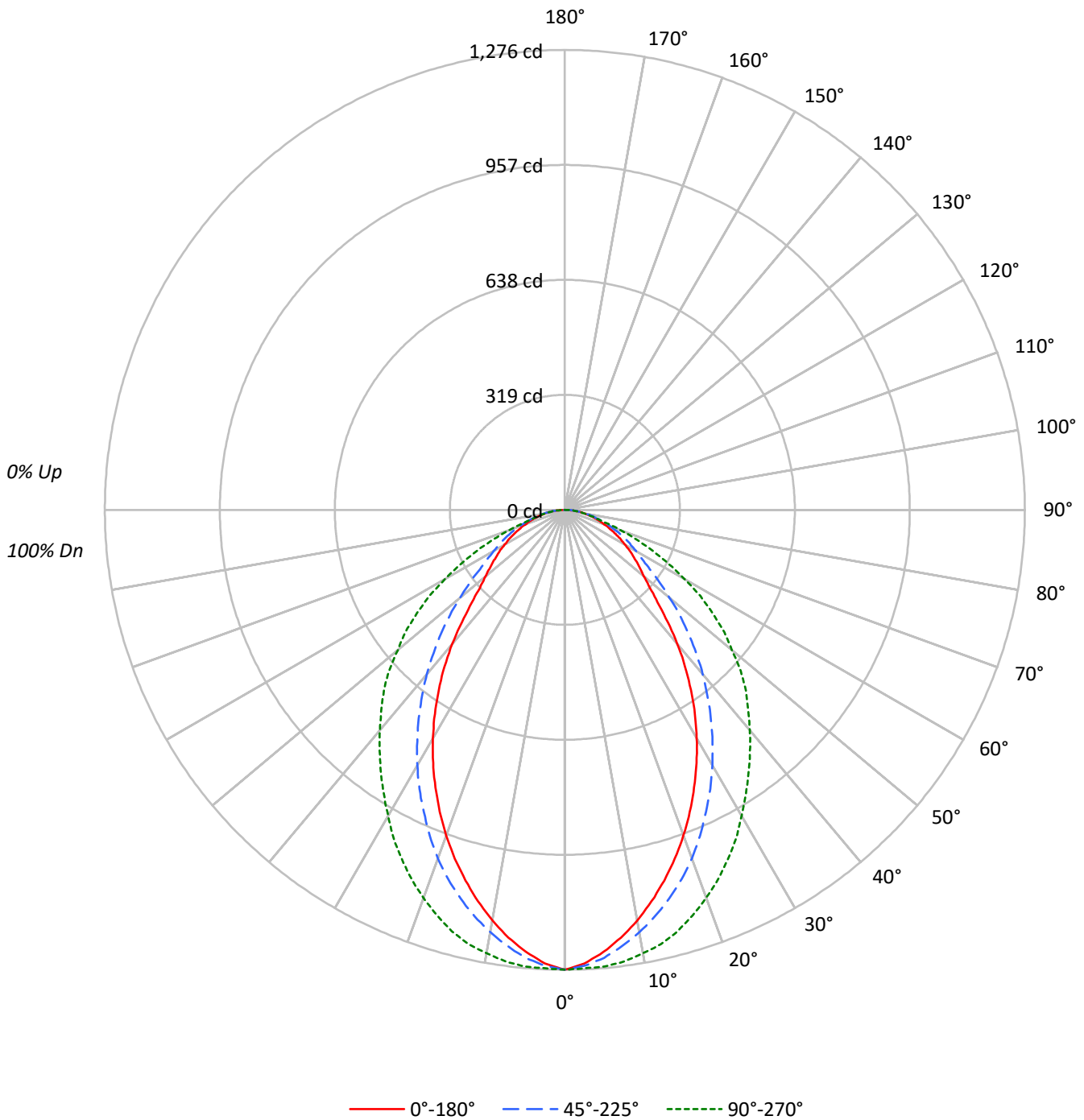
Lumens per Lamp: N/A
Luminaire Lumens: 2322.5 lumens
Efficiency: N/A
Efficacy: 55.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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										
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°	10985	10985	10985
5°	10645	10784	10993
10°	10114	10406	10920
15°	9489	9953	10788
20°	8810	9435	10502
25°	8068	8792	10164
30°	7273	8138	9745
35°	6410	7422	9347
40°	5456	6688	8974
45°	4429	5911	8646
50°	3834	5088	8097
55°	3554	4316	7508
60°	3317	3892	6586
65°	3105	3651	5477
70°	2895	3366	4142
75°	2758	3114	2981
80°	2584	2851	2519
85°	2381	2638	1986

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8646 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	5.1
10°-20°	316.6	13.6
20°-30°	432.3	18.6
30°-40°	452.9	19.5
40°-50°	392.0	16.9
50°-60°	294.6	12.7
60°-70°	189.9	8.2
70°-80°	97.4	4.2
80°-90°	29.1	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°	866.6	37.3
0°-40°	1319.5	56.8
0°-60°	2006.0	86.4
0°-90°	2322.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2322.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1276	1276	1276	1276	1276	
5°	1232	1250	1248	1257	1272	115
15°	1064	1091	1116	1167	1210	298
25°	849	881	925	998	1070	390
35°	610	644	706	800	889	380
45°	364	401	485	604	710	287
55°	237	245	288	410	500	213
65°	152	155	179	217	269	151
75°	83	92	94	92	90	88
85°	24	28	27	25	20	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.7	1275.7	1275.7	1275.7	1275.7
2.5°	1259.6	1275.7	1266.3	1269.0	1273.0
5°	1231.5	1250.3	1247.6	1256.9	1271.7
7.5°	1196.8	1216.8	1220.8	1242.2	1263.6
10°	1156.7	1179.4	1190.1	1222.2	1248.9
12.5°	1112.5	1136.6	1155.3	1195.4	1234.2
15°	1064.4	1091.1	1116.5	1167.4	1210.1
17.5°	1014.9	1041.7	1075.1	1131.2	1179.4
20°	961.4	990.8	1029.6	1088.5	1146.0
22.5°	906.6	937.4	978.8	1043.0	1109.9
25°	849.1	881.2	925.3	997.5	1069.7
27.5°	791.6	823.7	873.2	949.4	1028.3
30°	731.4	764.9	818.4	901.3	980.1
32.5°	671.3	707.4	762.2	850.4	934.7
35°	609.8	644.5	706.0	799.6	889.2
37.5°	548.2	584.3	649.9	750.2	843.8
40°	485.4	522.8	595.0	700.7	798.3
42.5°	422.5	462.7	538.9	649.9	752.8
45°	363.7	401.2	485.4	604.4	710.0
47.5°	319.6	345.0	431.9	560.3	661.9
50°	286.2	299.5	379.8	512.1	604.4
52.5°	260.7	270.1	331.6	460.0	557.6
55°	236.7	244.7	287.5	410.5	500.1
57.5°	215.3	219.3	254.1	362.4	445.3
60°	192.6	196.6	226.0	310.2	382.4
62.5°	172.5	175.2	203.3	260.7	324.9
65°	152.4	155.1	179.2	216.6	268.8
67.5°	133.7	137.7	156.4	176.5	213.9
70°	115.0	123.0	133.7	143.1	164.5
72.5°	99.0	107.0	112.3	115.0	116.3
75°	82.9	92.3	93.6	92.3	89.6
77.5°	66.9	74.9	74.9	72.2	69.5
80°	52.1	58.8	57.5	54.8	50.8
82.5°	38.8	42.8	41.5	38.8	34.8
85°	24.1	28.1	26.7	25.4	20.1
87.5°	12.0	16.0	14.7	13.4	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)