

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: P1060371

Luminaire Tested: S124RDR-S1195D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060371
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

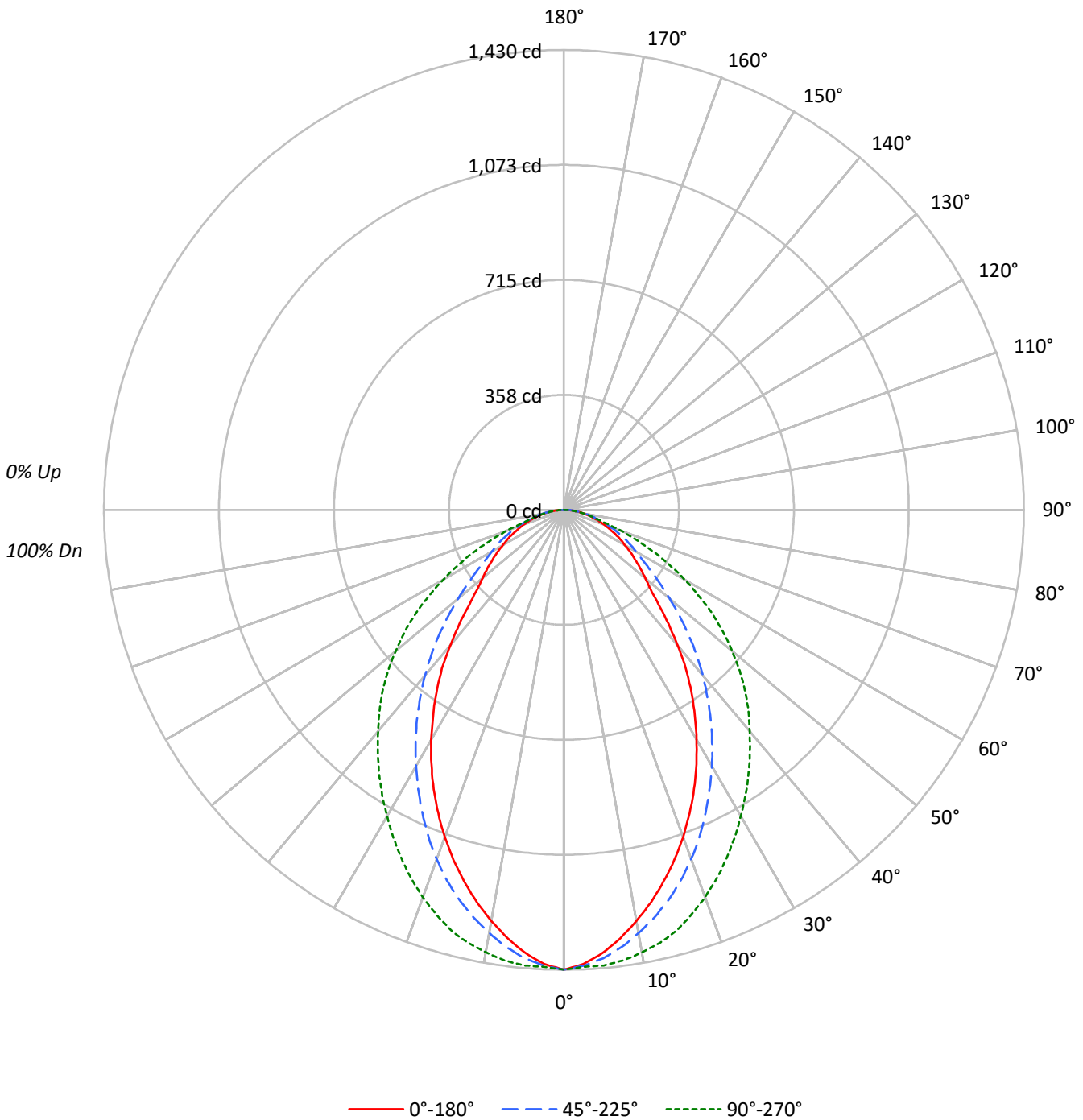
Lumens per Lamp: N/A
Luminaire Lumens: 2623.4 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65			65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57			57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50			50	
6	75	62	54	48	73	61	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	53	47	43	52	47	42	40			40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37			37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33			33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31			31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12311	12311	12311
5°	11954	12096	12293
10°	11351	11683	12214
15°	10670	11189	12069
20°	9924	10597	11745
25°	9100	9894	11360
30°	8202	9146	10933
35°	7262	8366	10521
40°	6172	7552	10098
45°	5054	6671	9707
50°	4424	5728	9136
55°	4066	4939	8452
60°	3770	4445	7452
65°	3531	4177	6239
70°	3313	3822	4683
75°	3114	3493	3410
80°	2886	3199	2886
85°	2628	3122	2500

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9707 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.1	5.0
10°-20°	355.5	13.6
20°-30°	485.9	18.5
30°-40°	510.7	19.5
40°-50°	443.2	16.9
50°-60°	334.3	12.7
60°-70°	216.7	8.3
70°-80°	111.2	4.2
80°-90°	33.7	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°	973.6	37.1
0°-40°	1484.3	56.6
0°-60°	2261.8	86.2
0°-90°	2623.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2623.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1383	1402	1399	1411	1422	129
15°	1197	1226	1255	1312	1354	336
25°	958	992	1041	1121	1196	439
35°	691	729	796	902	1001	430
45°	415	454	548	684	797	327
55°	271	278	329	467	563	244
65°	173	177	205	248	306	173
75°	94	105	105	106	102	99
85°	27	33	32	30	25	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.7	1429.7	1429.7	1429.7	1429.7
2.5°	1413.2	1431.0	1418.3	1420.8	1422.1
5°	1382.9	1401.9	1399.3	1410.7	1422.1
7.5°	1343.7	1366.4	1371.5	1394.3	1413.2
10°	1298.1	1323.4	1336.1	1372.8	1396.8
12.5°	1250.0	1275.3	1298.1	1344.9	1379.1
15°	1196.9	1226.0	1255.1	1312.0	1353.8
17.5°	1141.2	1171.6	1208.3	1270.3	1319.6
20°	1083.0	1113.4	1156.4	1223.5	1281.7
22.5°	1021.0	1055.2	1100.7	1172.9	1241.2
25°	957.8	991.9	1041.3	1121.0	1195.6
27.5°	892.0	927.4	980.5	1069.1	1148.8
30°	824.9	862.9	919.8	1013.4	1099.5
32.5°	756.6	797.1	857.8	957.8	1051.4
35°	690.8	728.8	795.8	902.1	1000.8
37.5°	622.5	660.4	732.6	847.7	950.2
40°	549.1	590.9	671.8	790.8	898.3
42.5°	480.8	522.5	609.8	736.4	849.0
45°	415.0	454.2	547.8	684.5	797.1
47.5°	364.4	392.2	485.8	633.9	741.4
50°	330.2	342.9	427.6	578.2	682.0
52.5°	299.9	310.0	374.5	522.5	623.8
55°	270.8	278.3	329.0	466.9	563.0
57.5°	245.5	249.2	288.5	411.2	497.2
60°	218.9	223.9	258.1	354.3	432.7
62.5°	197.4	199.9	231.5	299.9	368.2
65°	173.3	177.1	205.0	248.0	306.2
67.5°	151.8	158.2	177.1	202.4	241.7
70°	131.6	140.4	151.8	164.5	186.0
72.5°	112.6	122.7	129.1	134.1	130.3
75°	93.6	105.0	105.0	106.3	102.5
77.5°	75.9	86.0	84.8	83.5	78.4
80°	58.2	67.1	64.5	63.3	58.2
82.5°	43.0	49.3	46.8	45.5	39.2
85°	26.6	32.9	31.6	30.4	25.3
87.5°	12.7	19.0	17.7	16.4	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)