

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: P1060326

Luminaire Tested: S124RDR-S1195D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060326
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-S1195D840-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, 80 CRI LEDS
Ballast/Driver: -

Summary

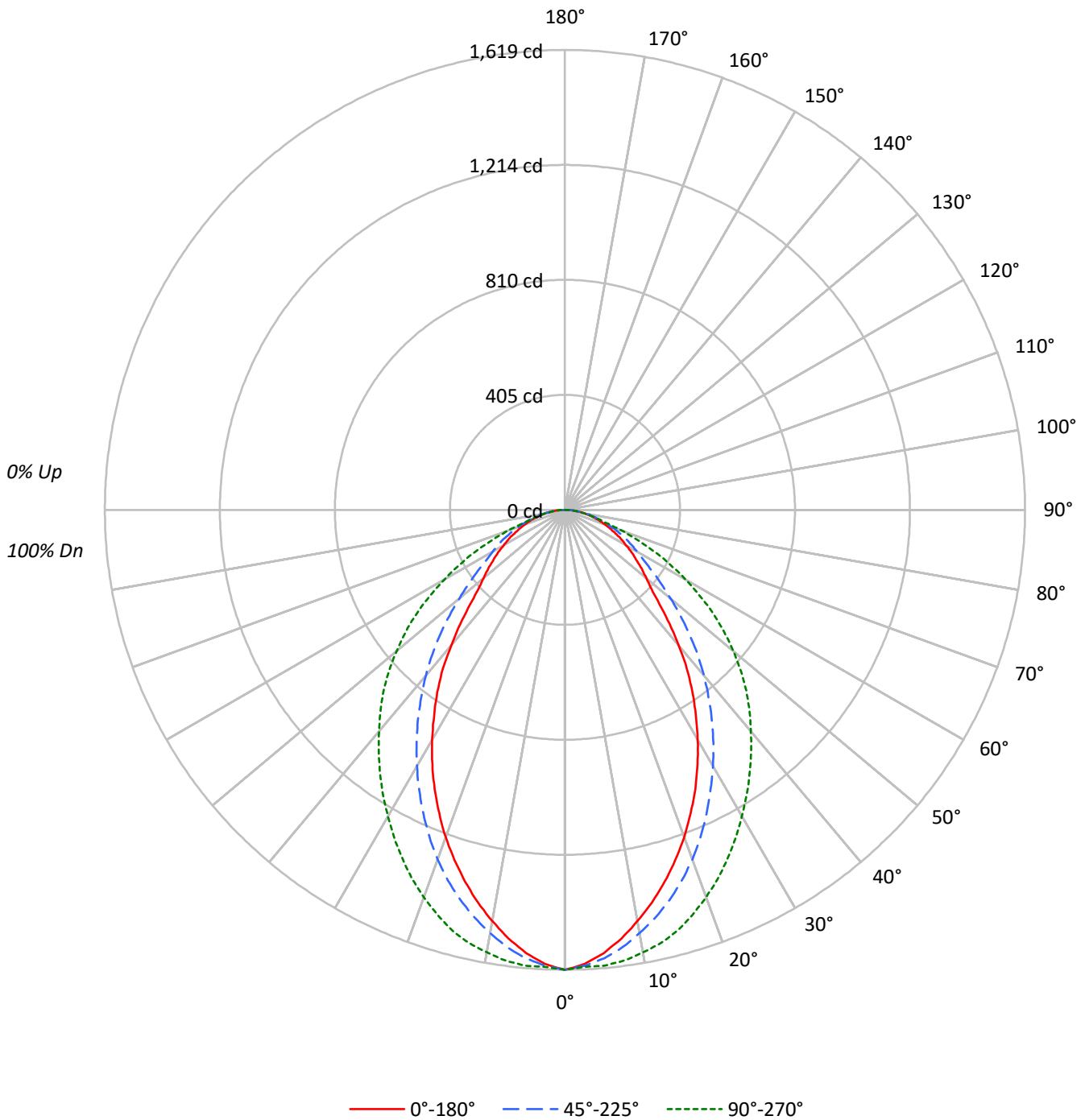
Lumens per Lamp: N/A
Luminaire Lumens: 2971.0 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060326

CATALOG NUMBER: S124RDR-S1195D840-X4F0-XX-UDD-WVL-W

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	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77				75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67				65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59				57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52				50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47				45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42				40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38				37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35				33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32				31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13942	13942	13942
5°	13537	13698	13921
10°	12855	13231	13832
15°	12084	12672	13668
20°	11239	12001	13301
25°	10306	11204	12866
30°	9289	10358	12381
35°	8224	9475	11915
40°	6991	8553	11436
45°	5724	7555	10993
50°	5010	6488	10346
55°	4603	5592	9572
60°	4269	5034	8439
65°	4000	4729	7066
70°	3751	4328	5302
75°	3527	3956	3863
80°	3268	3625	3268
85°	2974	3537	2836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10993 cd/sqm

TEST NUMBER: P1060326

CATALOG NUMBER: S124RDR-S1195D840-X4F0-XX-UDD-WVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.6	5.0
10°-20°	402.6	13.6
20°-30°	550.3	18.5
30°-40°	578.4	19.5
40°-50°	501.9	16.9
50°-60°	378.6	12.7
60°-70°	245.4	8.3
70°-80°	126.0	4.2
80°-90°	38.2	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°	1102.6	37.1
0°-40°	1680.9	56.6
0°-60°	2561.5	86.2
0°-90°	2971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2971.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1619	1619	1619	1619	1619	
5°	1566	1588	1585	1598	1610	146
15°	1356	1388	1421	1486	1533	380
25°	1085	1123	1179	1270	1354	497
35°	782	825	901	1022	1133	487
45°	470	514	620	775	903	370
55°	307	315	372	529	638	276
65°	196	201	232	281	347	195
75°	106	119	119	120	116	113
85°	30	37	36	34	29	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1619.1	1619.1	1619.1	1619.1	1619.1
2.5°	1600.5	1620.6	1606.2	1609.1	1610.5
5°	1566.1	1587.6	1584.7	1597.6	1610.5
7.5°	1521.7	1547.5	1553.2	1579.0	1600.5
10°	1470.1	1498.8	1513.1	1554.7	1581.9
12.5°	1415.7	1444.3	1470.1	1523.1	1561.8
15°	1355.5	1388.4	1421.4	1485.9	1533.2
17.5°	1292.4	1326.8	1368.4	1438.6	1494.5
20°	1226.5	1260.9	1309.6	1385.6	1451.5
22.5°	1156.3	1195.0	1246.6	1328.3	1405.6
25°	1084.7	1123.4	1179.2	1269.5	1354.1
27.5°	1010.2	1050.3	1110.5	1210.8	1301.0
30°	934.2	977.2	1041.7	1147.7	1245.2
32.5°	856.9	902.7	971.5	1084.7	1190.7
35°	782.3	825.3	901.3	1021.6	1133.4
37.5°	705.0	748.0	829.6	960.0	1076.1
40°	621.9	669.1	760.9	895.5	1017.3
42.5°	544.5	591.8	690.6	833.9	961.5
45°	470.0	514.4	620.4	775.2	902.7
47.5°	412.7	444.2	550.2	717.9	839.7
50°	374.0	388.3	484.3	654.8	772.3
52.5°	339.6	351.1	424.1	591.8	706.4
55°	306.6	315.2	372.5	528.7	637.6
57.5°	278.0	282.3	326.7	465.7	563.1
60°	247.9	253.6	292.3	401.2	490.0
62.5°	223.5	226.4	262.2	339.6	417.0
65°	196.3	200.6	232.1	280.8	346.8
67.5°	171.9	179.1	200.6	229.3	273.7
70°	149.0	159.0	171.9	186.3	210.6
72.5°	127.5	139.0	146.2	151.9	147.6
75°	106.0	118.9	118.9	120.4	116.1
77.5°	86.0	97.4	96.0	94.6	88.8
80°	65.9	75.9	73.1	71.6	65.9
82.5°	48.7	55.9	53.0	51.6	44.4
85°	30.1	37.3	35.8	34.4	28.7
87.5°	14.3	21.5	20.1	18.6	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)