

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: P1060326

Luminaire Tested: S124RDRP-S1195D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S124RDRP-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

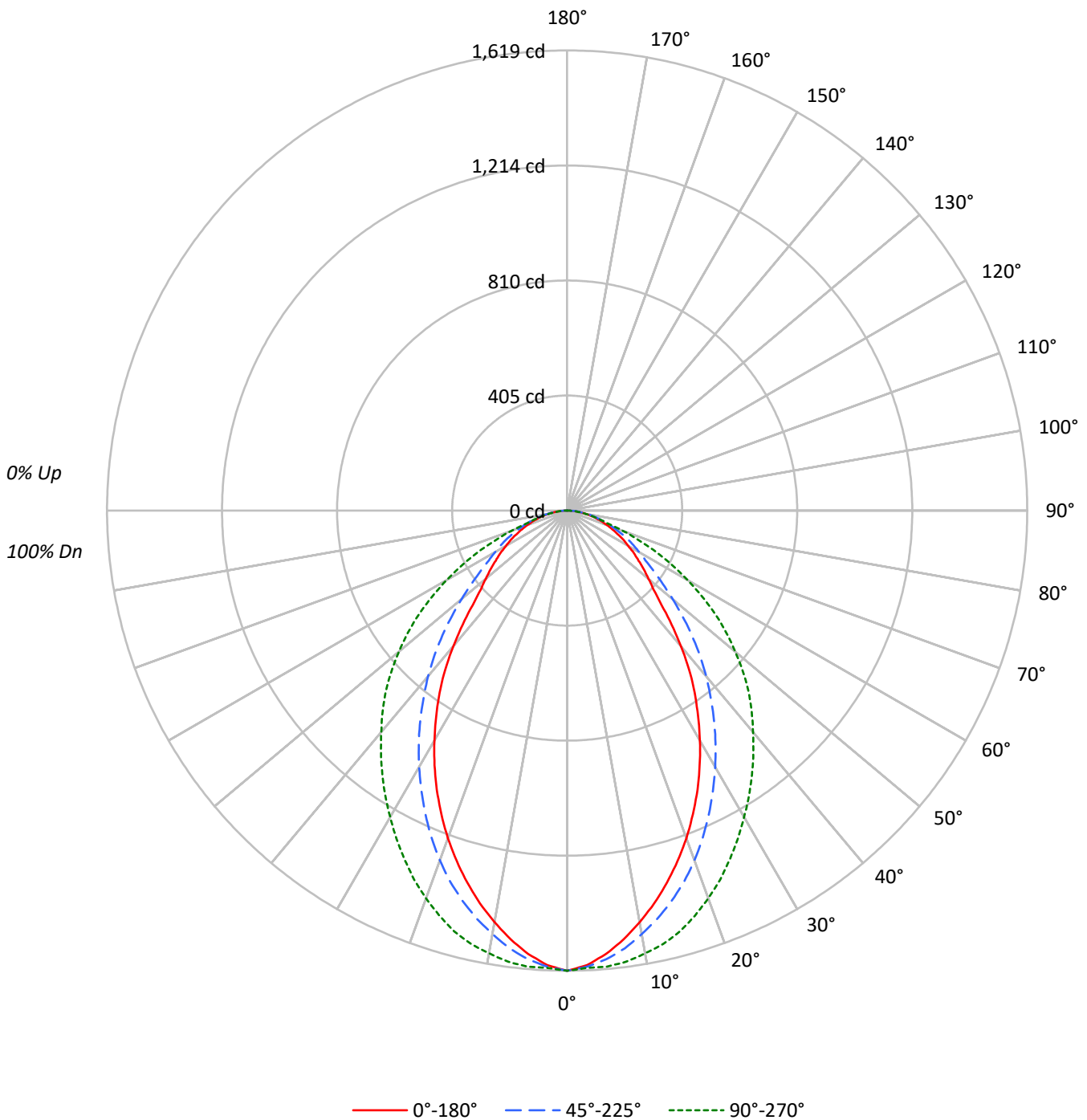
Lumens per Lamp: N/A
Luminaire Lumens: 2971.0 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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



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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



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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	15.66	17.14	16.02	17.46	17.77	19.40	20.88	19.76	21.20	21.51
	3H	17.33	18.66	17.70	18.99	19.35	20.52	21.85	20.90	22.18	22.54
	4H	17.99	19.24	18.39	19.59	19.97	20.82	22.07	21.22	22.42	22.80
	6H	18.50	19.65	18.91	20.02	20.41	21.02	22.17	21.43	22.54	22.93
	8H	18.67	19.77	19.10	20.16	20.56	21.07	22.17	21.50	22.56	22.96
	12H	18.79	19.84	19.22	20.23	20.66	21.11	22.16	21.54	22.54	22.97
4H	2H	16.45	17.70	16.85	18.05	18.43	19.56	20.81	19.96	21.16	21.54
	3H	18.32	19.36	18.73	19.76	20.16	20.89	21.93	21.30	22.33	22.73
	4H	19.13	20.06	19.56	20.47	20.91	21.31	22.24	21.74	22.66	23.10
	6H	19.77	20.58	20.23	21.02	21.48	21.63	22.44	22.09	22.88	23.34
	8H	19.99	20.75	20.46	21.19	21.66	21.72	22.48	22.19	22.93	23.39
	12H	20.16	20.83	20.64	21.31	21.78	21.80	22.47	22.28	22.95	23.42
8H	4H	19.47	20.23	19.94	20.67	21.14	21.44	22.20	21.91	22.64	23.11
	6H	20.26	20.89	20.76	21.38	21.86	21.86	22.49	22.36	22.98	23.46
	8H	20.58	21.14	21.10	21.65	22.14	22.02	22.58	22.53	23.09	23.58
	12H	20.85	21.34	21.36	21.83	22.40	22.16	22.65	22.67	23.15	23.71
12H	4H	19.50	20.18	19.99	20.66	21.13	21.45	22.12	21.93	22.60	23.07
	6H	20.32	20.89	20.84	21.40	21.89	21.88	22.44	22.40	22.95	23.44
	8H	20.71	21.21	21.22	21.70	22.26	22.09	22.59	22.60	23.08	23.65