

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: P1060369

Luminaire Tested: S124RDRP-S1195D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060369
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D940-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

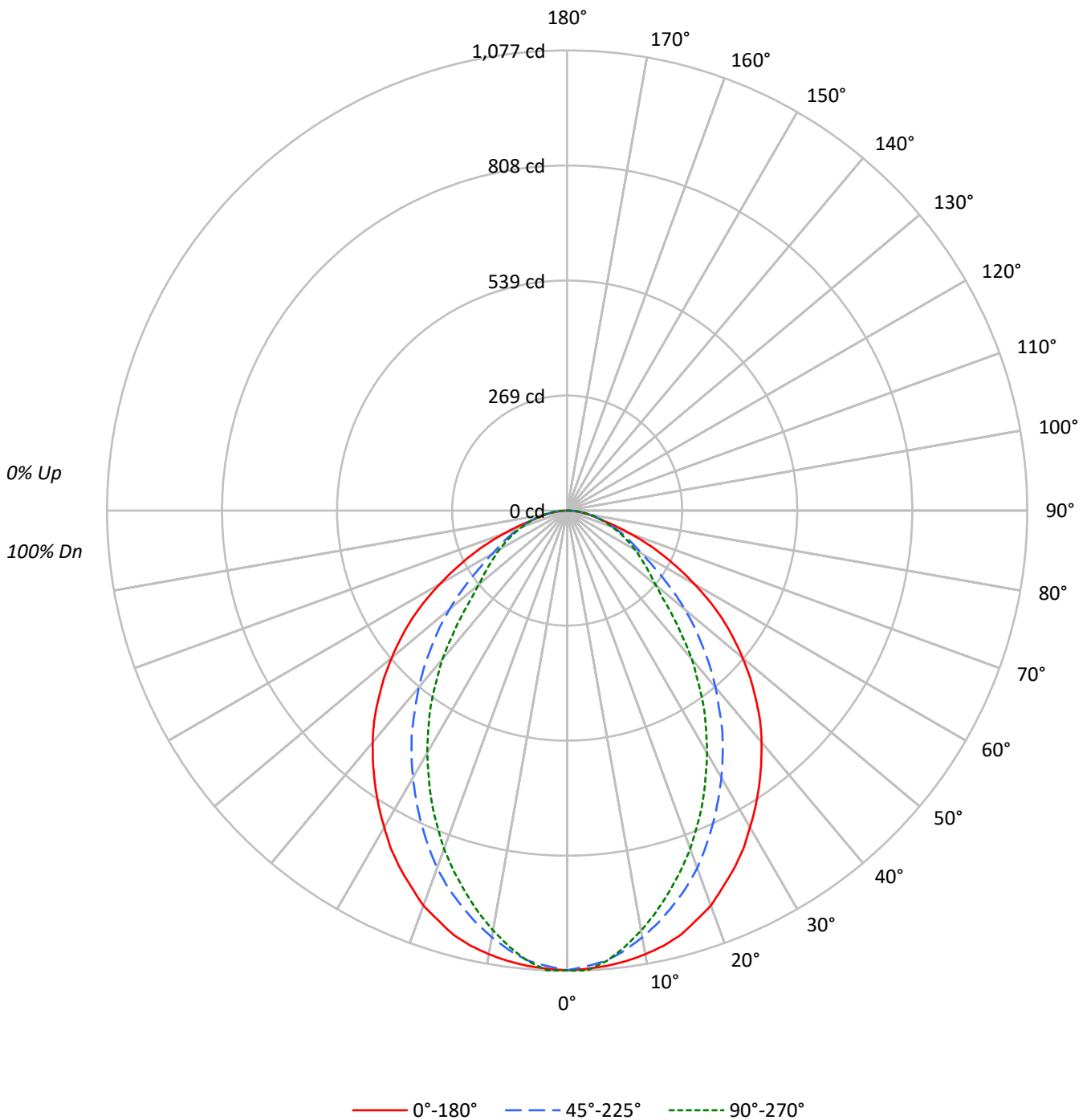
Lumens per Lamp: N/A
Luminaire Lumens: 2074.7 lumens
Efficiency: N/A
Efficacy: 49.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9266	9266	9266
5°	9246	9137	9148
10°	9221	8866	8723
15°	9164	8532	8228
20°	9014	8157	7717
25°	8781	7676	7136
30°	8511	7178	6512
35°	8241	6658	5848
40°	7959	6069	5102
45°	7606	5451	4265
50°	7182	4811	3608
55°	6682	4081	3340
60°	5923	3462	3157
65°	5049	3195	2989
70°	3948	2961	2832
75°	2692	2735	2735
80°	2321	2569	2633
85°	1996	2500	2747

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7606 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	4.8
10°-20°	271.9	13.1
20°-30°	377.4	18.2
30°-40°	404.6	19.5
40°-50°	358.4	17.3
50°-60°	270.1	13.0
60°-70°	174.9	8.4
70°-80°	89.8	4.3
80°-90°	27.5	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°	749.4	36.1
0°-40°	1154.0	55.6
0°-60°	1782.5	85.9
0°-90°	2074.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2074.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1070	1071	1057	1058	1058	102
15°	1028	1005	957	933	923	289
25°	924	875	808	765	751	425
35°	784	713	633	576	556	490
45°	625	544	448	378	350	482
55°	445	370	272	229	222	395
65°	248	200	157	148	147	246
75°	81	85	82	82	82	96
85°	20	22	25	28	28	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1073.4	1077.2	1067.1	1074.7	1077.2
5°	1069.6	1070.9	1057.0	1058.3	1058.3
7.5°	1063.3	1060.8	1038.0	1031.7	1030.4
10°	1054.5	1046.9	1014.0	1001.4	997.6
12.5°	1043.1	1029.2	987.5	969.8	962.2
15°	1027.9	1005.2	957.1	933.1	923.0
17.5°	1005.2	976.1	925.5	895.2	883.8
20°	983.7	944.5	890.1	852.2	842.1
22.5°	953.3	911.6	849.6	809.2	796.5
25°	924.2	874.9	807.9	764.9	751.0
27.5°	892.6	837.0	764.9	719.4	701.7
30°	856.0	796.5	721.9	673.9	654.9
32.5°	820.6	757.3	677.7	624.6	604.4
35°	783.9	713.1	633.4	576.5	556.3
37.5°	746.0	671.4	584.1	528.5	501.9
40°	708.0	629.6	539.9	476.7	453.9
42.5°	668.8	586.7	494.4	428.6	399.5
45°	624.6	543.7	447.6	378.0	350.2
47.5°	581.6	501.9	404.6	328.7	303.4
50°	536.1	457.7	359.1	285.7	269.3
52.5°	490.6	412.2	314.8	252.9	245.3
55°	445.1	370.5	271.8	228.8	222.5
57.5°	394.5	327.5	233.9	207.4	202.3
60°	343.9	280.7	201.0	187.1	183.3
62.5°	294.6	240.2	178.3	166.9	164.4
65°	247.8	199.8	156.8	147.9	146.7
67.5°	202.3	164.4	136.6	131.5	129.0
70°	156.8	131.5	117.6	115.1	112.5
72.5°	116.3	106.2	99.9	98.6	97.4
75°	80.9	84.7	82.2	82.2	82.2
77.5°	64.5	65.7	67.0	68.3	67.0
80°	46.8	50.6	51.8	54.4	53.1
82.5°	32.9	35.4	39.2	40.5	41.7
85°	20.2	21.5	25.3	27.8	27.8
87.5°	8.9	10.1	12.6	15.2	16.4
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	18.17	19.67	18.54	19.99	20.30	14.74	16.24	15.10	16.55	16.87
	3H	19.38	20.72	19.76	21.05	21.41	16.43	17.78	16.81	18.11	18.47
	4H	19.69	20.95	20.09	21.29	21.67	17.11	18.37	17.51	18.72	19.10
	6H	19.89	21.05	20.30	21.42	21.81	17.66	18.82	18.07	19.19	19.58
	8H	19.95	21.05	20.37	21.44	21.85	17.88	18.99	18.31	19.38	19.78
	12H	19.98	21.04	20.41	21.42	21.85	18.05	19.11	18.48	19.49	19.92
4H	2H	18.32	19.58	18.72	19.92	20.30	15.40	16.66	15.80	17.01	17.39
	3H	19.72	20.76	20.13	21.16	21.57	17.31	18.35	17.72	18.75	19.16
	4H	20.14	21.08	20.58	21.50	21.94	18.11	19.05	18.54	19.47	19.91
	6H	20.47	21.29	20.93	21.73	22.19	18.80	19.62	19.26	20.06	20.52
	8H	20.57	21.33	21.03	21.78	22.24	19.07	19.84	19.54	20.28	20.75
	12H	20.64	21.32	21.12	21.80	22.27	19.30	19.99	19.79	20.46	20.94
8H	4H	20.27	21.04	20.74	21.48	21.95	18.43	19.19	18.89	19.64	20.10
	6H	20.69	21.32	21.19	21.82	22.29	19.26	19.89	19.75	20.38	20.86
	8H	20.85	21.42	21.36	21.93	22.42	19.62	20.19	20.14	20.70	21.19
	12H	20.98	21.48	21.49	21.97	22.54	19.96	20.46	20.47	20.95	21.52
12H	4H	20.28	20.96	20.76	21.44	21.91	18.46	19.14	18.94	19.62	20.09
	6H	20.72	21.29	21.23	21.80	22.28	19.32	19.88	19.83	20.40	20.88
	8H	20.93	21.43	21.44	21.92	22.49	19.75	20.25	20.26	20.74	21.31