

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: P1060932

Luminaire Tested: S124RDRP-H575D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060932
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-H575D940-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

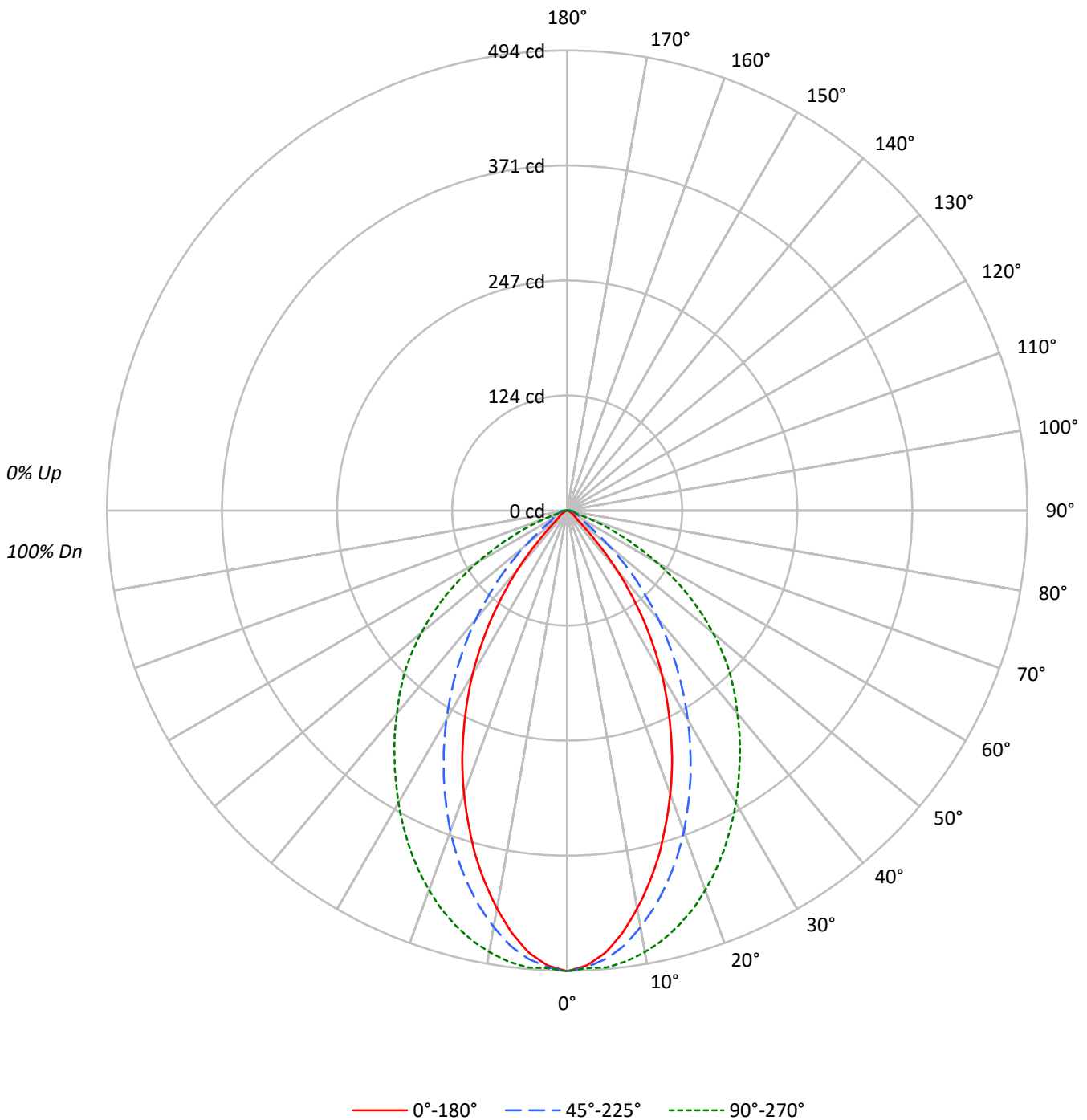
Lumens per Lamp: N/A
Luminaire Lumens: 623.3 lumens
Efficiency: N/A
Efficacy: 35.8 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.4
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65					65			
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59					59			
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45					45			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39					39			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4258	4258	4258
5°	4115	4174	4255
10°	3791	3969	4208
15°	3405	3689	4113
20°	2968	3357	3973
25°	2504	2978	3800
30°	2020	2574	3601
35°	1495	2154	3399
40°	926	1717	3197
45°	368	1251	3012
50°	163	785	2737
55°	131	410	2396
60°	90	310	1910
65°	59	308	1312
70°	58	277	614
75°	77	269	269
80°	114	317	317
85°	227	632	454

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3012 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	7.3
10°-20°	117.1	18.8
20°-30°	147.8	23.7
30°-40°	135.6	21.8
40°-50°	92.3	14.8
50°-60°	50.3	8.1
60°-70°	21.8	3.5
70°-80°	7.9	1.3
80°-90°	5.1	0.8
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°	310.2	49.8
0°-40°	445.8	71.5
0°-60°	588.4	94.4
0°-90°	623.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	623.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	476	482	483	488	492	44
15°	382	395	414	443	461	106
25°	264	282	313	363	400	120
35°	142	163	205	270	323	88
45°	30	50	103	182	247	28
55°	9	9	27	100	160	8
65°	3	4	15	31	64	3
75°	2	8	8	8	8	2
85°	2	5	6	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	494.5	494.5	494.5	494.5	494.5
2.5°	488.7	494.5	490.5	491.6	491.6
5°	476.0	482.3	482.9	488.1	492.2
7.5°	456.8	466.1	470.7	481.2	488.1
10°	433.6	444.6	453.9	471.9	481.2
12.5°	408.6	421.4	435.3	459.1	472.5
15°	381.9	395.3	413.8	443.4	461.4
17.5°	352.3	368.6	391.2	426.6	448.7
20°	323.9	340.1	366.3	406.3	433.6
22.5°	294.3	311.1	340.1	384.8	417.3
25°	263.5	282.1	313.4	363.3	399.9
27.5°	233.3	253.1	286.2	340.7	381.3
30°	203.2	222.9	258.9	317.5	362.2
32.5°	172.4	192.7	231.6	293.1	342.5
35°	142.2	163.1	204.9	269.9	323.3
37.5°	111.4	133.5	178.2	247.3	304.1
40°	82.4	104.5	152.7	224.6	284.4
42.5°	55.1	77.2	126.5	202.6	265.8
45°	30.2	50.5	102.7	182.3	247.3
47.5°	16.3	27.9	79.5	162.5	226.4
50°	12.2	15.1	58.6	141.6	204.3
52.5°	10.4	11.6	40.6	119.6	182.3
55°	8.7	9.3	27.3	100.4	159.6
57.5°	7.0	7.5	20.3	81.3	135.2
60°	5.2	6.4	18.0	62.7	110.9
62.5°	4.1	5.2	16.8	45.9	87.6
65°	2.9	4.1	15.1	31.3	64.4
67.5°	2.9	4.6	12.8	20.3	43.5
70°	2.3	6.4	11.0	13.3	24.4
72.5°	2.3	7.0	9.3	9.3	9.3
75°	2.3	7.5	8.1	8.1	8.1
77.5°	2.3	7.0	7.5	7.0	7.0
80°	2.3	6.4	6.4	6.4	6.4
82.5°	2.3	5.8	6.4	6.4	5.2
85°	2.3	5.2	6.4	6.4	4.6
87.5°	1.7	5.2	5.8	5.8	3.5
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	0.00	0.00	0.00	0.00	0.00	13.44	14.72	13.81	15.04	15.35
	3H	0.00	0.00	0.00	0.00	0.00	13.82	14.95	14.20	15.28	15.65
	4H	0.00	0.00	0.00	0.09	0.48	13.80	14.85	14.20	15.20	15.59
	6H	0.00	0.84	0.29	1.21	1.61	13.79	14.75	14.20	15.12	15.52
	8H	0.46	1.38	0.89	1.77	2.17	13.79	14.70	14.22	15.09	15.50
	12H	1.13	2.00	1.56	2.38	2.82	13.80	14.67	14.23	15.06	15.49
4H	2H	0.00	0.73	0.08	1.08	1.47	13.26	14.31	13.66	14.66	15.04
	3H	1.27	2.13	1.68	2.53	2.93	13.67	14.53	14.09	14.94	15.34
	4H	2.55	3.32	2.99	3.74	4.18	13.67	14.44	14.11	14.86	15.30
	6H	3.69	4.35	4.15	4.79	5.26	13.71	14.37	14.18	14.82	15.29
	8H	4.19	4.81	4.66	5.26	5.73	13.74	14.36	14.21	14.81	15.28
	12H	4.74	5.28	5.22	5.77	6.24	13.80	14.35	14.29	14.83	15.31
8H	4H	3.64	4.25	4.11	4.70	5.17	13.58	14.20	14.05	14.65	15.12
	6H	5.19	5.69	5.69	6.19	6.67	13.66	14.17	14.16	14.66	15.15
	8H	5.99	6.45	6.52	6.97	7.46	13.74	14.20	14.27	14.72	15.21
	12H	6.82	7.22	7.34	7.72	8.29	13.91	14.32	14.43	14.81	15.38
12H	4H	3.83	4.37	4.31	4.86	5.33	13.55	14.09	14.03	14.57	15.05
	6H	5.55	6.00	6.07	6.52	7.01	13.63	14.09	14.16	14.61	15.10
	8H	6.56	6.96	7.07	7.45	8.03	13.77	14.17	14.29	14.67	15.24