

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: P1217354

Luminaire Tested: S124DRP-H1005D950-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217354
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-H1005D950-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

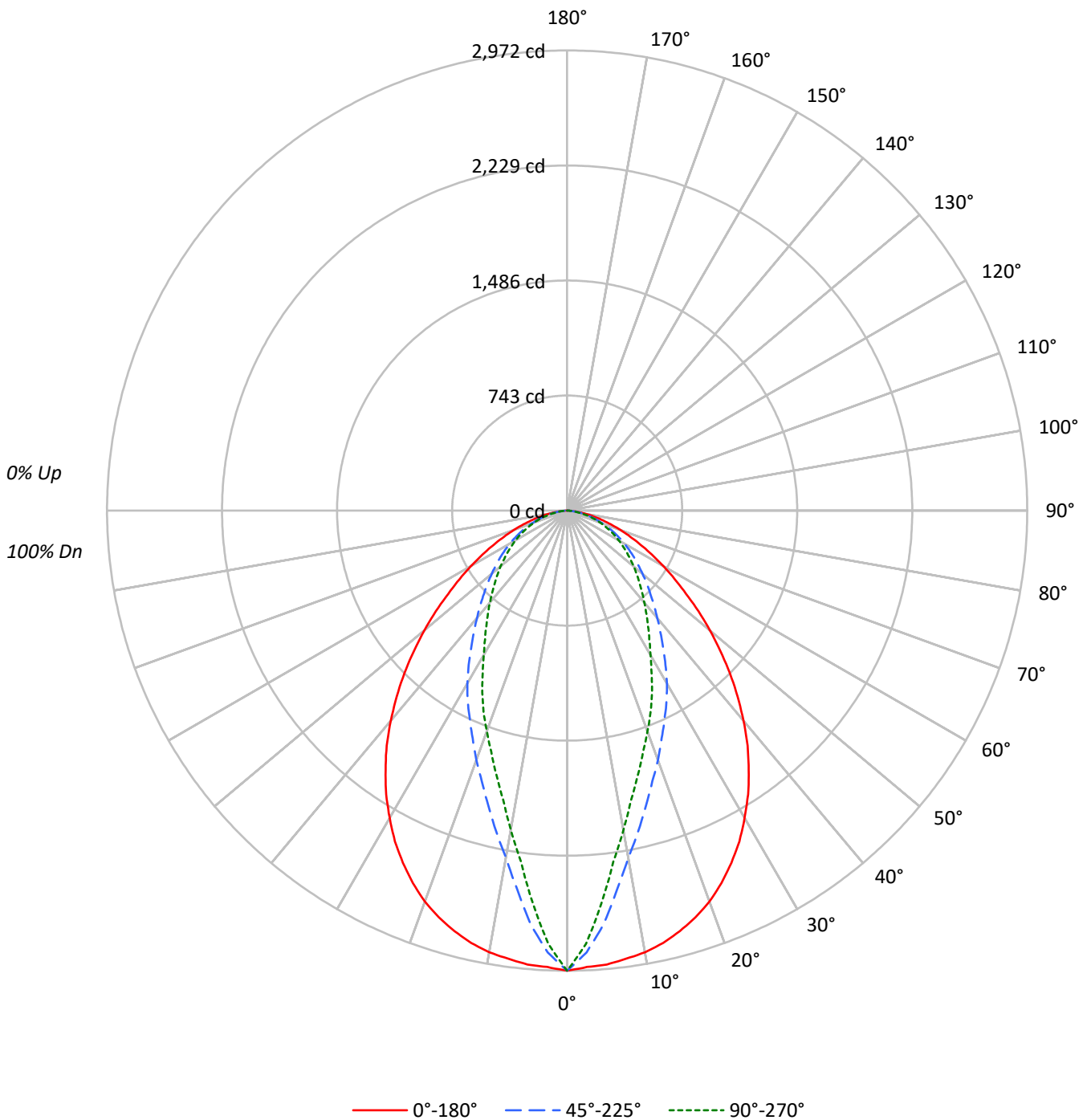
Lumens per Lamp: N/A
Luminaire Lumens: 4167.5 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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	108	104	100	97	100	97	94	96	94	92	92	90	89	87
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47	45
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36	34
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26273	26273	26273
5°	26118	23830	22587
10°	26009	20428	18796
15°	25738	18026	16168
20°	25287	16128	14281
25°	24483	14513	12650
30°	23404	13159	10981
35°	22075	11665	9829
40°	20448	10451	8955
45°	18585	9505	8262
50°	16558	8747	7721
55°	14442	8128	7220
60°	12679	7566	6803
65°	10977	6981	6351
70°	9505	6326	5853
75°	7912	5589	5141
80°	6130	4531	4195
85°	3845	3053	2790

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 18585 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.7	6.0
10°-20°	590.9	14.2
20°-30°	755.1	18.1
30°-40°	766.9	18.4
40°-50°	679.8	16.3
50°-60°	534.2	12.8
60°-70°	363.8	8.7
70°-80°	186.8	4.5
80°-90°	41.4	1.0
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°	1594.7	38.3
0°-40°	2361.6	56.7
0°-60°	3575.6	85.8
0°-90°	4167.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4167.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2972	2972	2972	2972	2972	
5°	2943	2868	2685	2582	2545	279
15°	2812	2347	1969	1807	1766	792
25°	2510	1840	1488	1345	1297	1153
35°	2045	1394	1081	943	911	1276
45°	1486	1004	760	682	661	1145
55°	937	669	527	480	468	846
65°	525	406	334	310	304	525
75°	232	191	164	156	150	249
85°	38	35	30	30	28	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2971.6	2971.6	2971.6	2971.6	2971.6
2.5°	2950.6	2954.6	2856.4	2821.1	2800.1
5°	2942.8	2868.2	2685.0	2581.6	2545.0
7.5°	2919.2	2757.0	2467.8	2325.2	2287.2
10°	2897.0	2630.0	2275.4	2134.1	2093.6
12.5°	2860.3	2490.0	2121.0	1958.8	1910.4
15°	2811.9	2347.4	1969.3	1807.0	1766.4
17.5°	2754.4	2211.3	1831.9	1676.2	1631.7
20°	2687.6	2085.7	1714.1	1554.5	1517.8
22.5°	2603.9	1961.4	1593.7	1449.8	1409.2
25°	2509.7	1839.7	1487.7	1345.1	1296.7
27.5°	2408.9	1722.0	1389.6	1231.3	1180.3
30°	2292.5	1609.4	1288.9	1122.7	1075.6
32.5°	2174.7	1498.2	1182.9	1025.8	987.9
35°	2045.2	1393.5	1080.8	943.4	910.7
37.5°	1914.3	1292.8	989.2	868.8	840.0
40°	1771.7	1194.6	905.5	799.5	775.9
42.5°	1629.1	1096.5	829.6	738.0	715.7
45°	1486.4	1003.6	760.2	681.7	660.8
47.5°	1342.5	912.0	696.1	626.8	609.8
50°	1203.8	825.7	635.9	575.7	561.3
52.5°	1069.0	744.5	578.3	527.3	511.6
55°	936.9	668.6	527.3	480.2	468.4
57.5°	824.3	598.0	476.3	435.7	426.6
60°	717.0	529.9	427.9	393.9	384.7
62.5°	616.3	467.1	379.5	352.0	345.4
65°	524.7	405.6	333.7	310.1	303.6
67.5°	441.0	349.4	286.6	269.5	264.3
70°	367.7	293.1	244.7	230.3	226.4
72.5°	294.4	239.5	202.8	192.3	188.4
75°	231.6	191.0	163.6	155.7	150.5
77.5°	174.0	145.2	125.6	119.1	115.1
80°	120.4	103.4	89.0	86.4	82.4
82.5°	75.9	65.4	57.6	56.3	52.3
85°	37.9	35.3	30.1	30.1	27.5
87.5°	13.1	11.8	11.8	11.8	10.5
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	20.26	21.75	20.63	22.06	22.38	17.59	19.07	17.95	19.39	19.70
	3H	21.85	23.19	22.23	23.51	23.88	19.18	20.52	19.56	20.85	21.21
	4H	22.38	23.63	22.78	23.98	24.36	19.74	20.99	20.14	21.34	21.72
	6H	22.71	23.87	23.13	24.24	24.63	20.10	21.25	20.51	21.62	22.01
	8H	22.79	23.89	23.22	24.28	24.68	20.18	21.28	20.61	21.67	22.07
	12H	22.82	23.87	23.25	24.25	24.68	20.22	21.27	20.65	21.65	22.08
4H	2H	20.49	21.74	20.89	22.09	22.47	18.26	19.51	18.66	19.86	20.24
	3H	22.27	23.31	22.68	23.71	24.11	20.05	21.09	20.46	21.49	21.89
	4H	22.91	23.85	23.35	24.26	24.70	20.71	21.64	21.15	22.06	22.50
	6H	23.36	24.17	23.82	24.61	25.07	21.17	21.98	21.63	22.42	22.88
	8H	23.47	24.23	23.94	24.67	25.14	21.29	22.04	21.75	22.49	22.95
	12H	23.53	24.20	24.01	24.68	25.15	21.35	22.02	21.83	22.50	22.97
8H	4H	23.02	23.77	23.48	24.22	24.69	21.01	21.77	21.48	22.21	22.68
	6H	23.54	24.16	24.03	24.65	25.13	21.56	22.18	22.06	22.68	23.15
	8H	23.69	24.25	24.21	24.76	25.25	21.73	22.29	22.24	22.80	23.29
	12H	23.79	24.28	24.30	24.78	25.34	21.84	22.33	22.35	22.82	23.39
12H	4H	23.01	23.68	23.49	24.16	24.63	21.04	21.71	21.52	22.19	22.66
	6H	23.53	24.09	24.04	24.60	25.09	21.60	22.16	22.11	22.67	23.16
	8H	23.72	24.21	24.23	24.71	25.27	21.81	22.30	22.32	22.80	23.36