

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: P1217425

Luminaire Tested: S124DRP-S675D940-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217425
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-S675D940-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

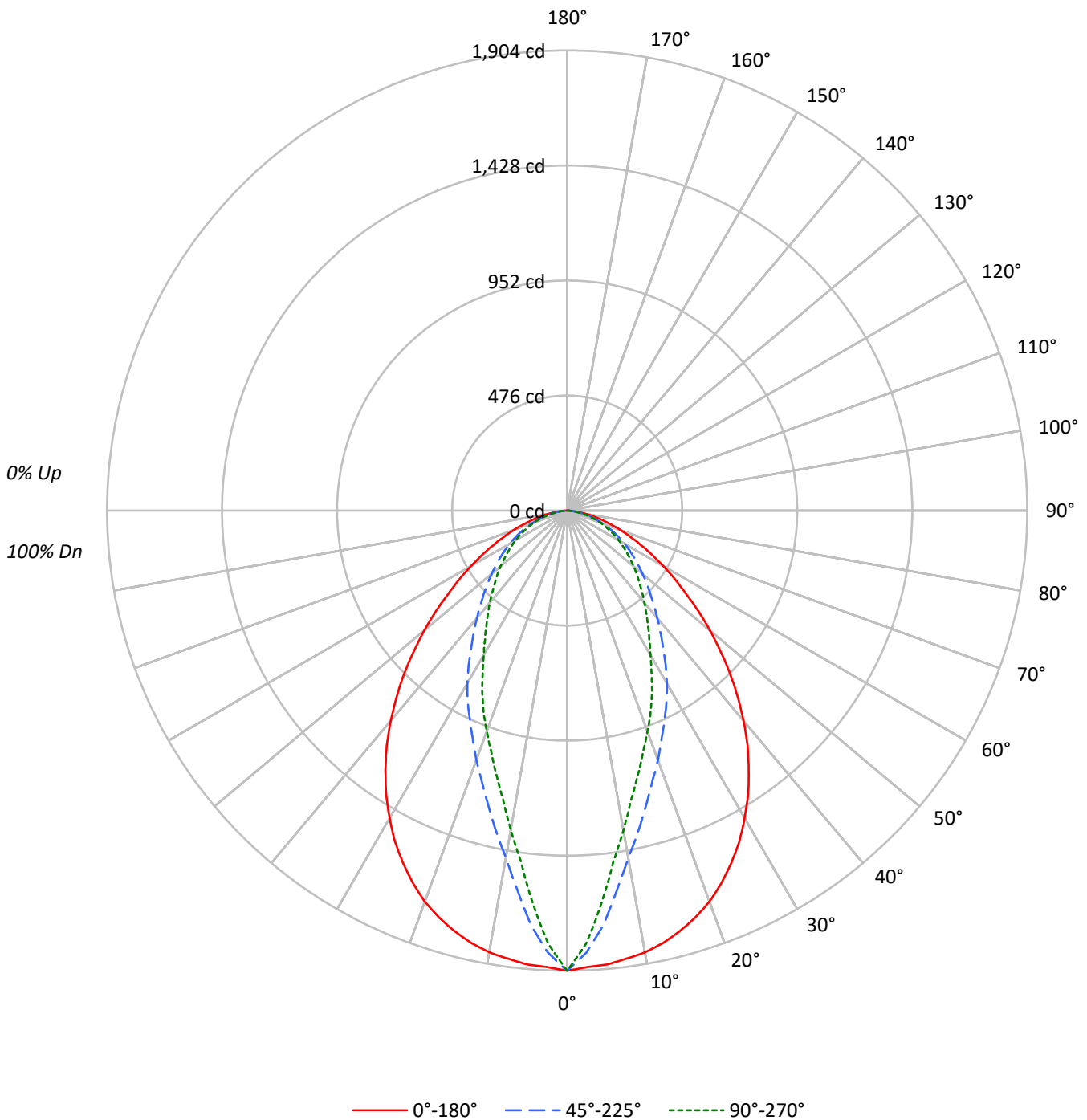
Lumens per Lamp: N/A
Luminaire Lumens: 2670.1 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 26.4
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: P1217425

CATALOG NUMBER: S124DRP-S675D940-X4F0-XX-UDD-G-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	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°	16833	16833	16833
5°	16733	15268	14472
10°	16664	13089	12043
15°	16491	11549	10360
20°	16202	10333	9150
25°	15686	9299	8105
30°	14995	8431	7035
35°	14142	7474	6298
40°	13101	6695	5737
45°	11908	6091	5294
50°	10609	5604	4946
55°	9253	5209	4626
60°	8123	4847	4359
65°	7033	4473	4069
70°	6090	4053	3748
75°	5069	3580	3293
80°	3926	2902	2688
85°	2465	1958	1785

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11908 cd/sqm



TEST NUMBER: P1217425

CATALOG NUMBER: S124DRP-S675D940-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.4	6.0
10°-20°	378.6	14.2
20°-30°	483.8	18.1
30°-40°	491.3	18.4
40°-50°	435.6	16.3
50°-60°	342.3	12.8
60°-70°	233.1	8.7
70°-80°	119.7	4.5
80°-90°	26.5	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°	1021.7	38.3
0°-40°	1513.1	56.7
0°-60°	2290.9	85.8
0°-90°	2670.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2670.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1904	1904	1904	1904	1904	
5°	1885	1838	1720	1654	1631	179
15°	1802	1504	1262	1158	1132	507
25°	1608	1179	953	862	831	739
35°	1310	893	692	604	584	818
45°	952	643	487	437	423	734
55°	600	428	338	308	300	542
65°	336	260	214	199	194	336
75°	148	122	105	100	96	159
85°	24	23	19	19	18	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1903.9	1903.9	1903.9	1903.9	1903.9
2.5°	1890.5	1893.0	1830.1	1807.5	1794.1
5°	1885.4	1837.7	1720.3	1654.1	1630.6
7.5°	1870.3	1766.4	1581.1	1489.7	1465.4
10°	1856.1	1685.1	1457.9	1367.3	1341.4
12.5°	1832.6	1595.4	1359.0	1255.0	1224.0
15°	1801.6	1504.0	1261.7	1157.8	1131.8
17.5°	1764.7	1416.8	1173.7	1073.9	1045.4
20°	1722.0	1336.3	1098.2	996.0	972.5
22.5°	1668.3	1256.7	1021.1	928.9	902.9
25°	1607.9	1178.7	953.2	861.8	830.8
27.5°	1543.4	1103.3	890.3	788.9	756.2
30°	1468.8	1031.2	825.8	719.3	689.1
32.5°	1393.3	959.9	757.9	657.3	633.0
35°	1310.3	892.8	692.5	604.4	583.5
37.5°	1226.5	828.3	633.8	556.7	538.2
40°	1135.1	765.4	580.1	512.2	497.1
42.5°	1043.7	702.5	531.5	472.8	458.6
45°	952.4	643.0	487.1	436.8	423.4
47.5°	860.1	584.3	446.0	401.6	390.7
50°	771.3	529.0	407.4	368.9	359.6
52.5°	684.9	477.0	370.5	337.9	327.8
55°	600.3	428.4	337.9	307.7	300.1
57.5°	528.2	383.1	305.2	279.2	273.3
60°	459.4	339.5	274.1	252.3	246.5
62.5°	394.9	299.3	243.1	225.5	221.3
65°	336.2	259.9	213.8	198.7	194.5
67.5°	282.5	223.8	183.6	172.7	169.3
70°	235.6	187.8	156.8	147.5	145.0
72.5°	188.6	153.4	129.9	123.2	120.7
75°	148.4	122.4	104.8	99.8	96.4
77.5°	111.5	93.1	80.5	76.3	73.8
80°	77.1	66.2	57.0	55.3	52.8
82.5°	48.6	41.9	36.9	36.0	33.5
85°	24.3	22.6	19.3	19.3	17.6
87.5°	8.4	7.5	7.5	7.5	6.7
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	18.71	20.20	19.08	20.51	20.83	16.04	17.53	16.40	17.84	18.15
	3H	20.31	21.64	20.68	21.97	22.33	17.64	18.97	18.02	19.30	19.66
	4H	20.84	22.09	21.24	22.43	22.81	18.20	19.45	18.60	19.79	20.17
	6H	21.17	22.32	21.58	22.69	23.08	18.55	19.70	18.96	20.07	20.46
	8H	21.25	22.34	21.67	22.73	23.13	18.64	19.74	19.06	20.13	20.53
	12H	21.27	22.32	21.70	22.71	23.14	18.67	19.72	19.10	20.11	20.54
4H	2H	18.94	20.19	19.34	20.54	20.92	16.72	17.97	17.12	18.31	18.69
	3H	20.73	21.76	21.14	22.16	22.56	18.50	19.54	18.91	19.94	20.34
	4H	21.37	22.30	21.80	22.71	23.15	19.17	20.10	19.60	20.51	20.95
	6H	21.81	22.62	22.27	23.07	23.53	19.62	20.43	20.08	20.88	21.34
	8H	21.92	22.68	22.39	23.12	23.59	19.74	20.49	20.20	20.94	21.41
	12H	21.98	22.66	22.46	23.14	23.61	19.80	20.47	20.28	20.95	21.42
8H	4H	21.47	22.23	21.93	22.67	23.14	19.47	20.22	19.93	20.67	21.13
	6H	21.99	22.61	22.49	23.10	23.58	20.01	20.64	20.51	21.13	21.61
	8H	22.14	22.70	22.66	23.21	23.70	20.18	20.74	20.70	21.25	21.74
	12H	22.24	22.74	22.75	23.23	23.79	20.29	20.78	20.80	21.27	21.84
12H	4H	21.46	22.14	21.94	22.61	23.09	19.49	20.16	19.97	20.64	21.11
	6H	21.98	22.54	22.50	23.05	23.54	20.05	20.61	20.57	21.12	21.61
	8H	22.17	22.67	22.68	23.16	23.73	20.27	20.76	20.78	21.25	21.82