

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: P1217377

Luminaire Tested: S124DRP-H675D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217377
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-H675D927-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

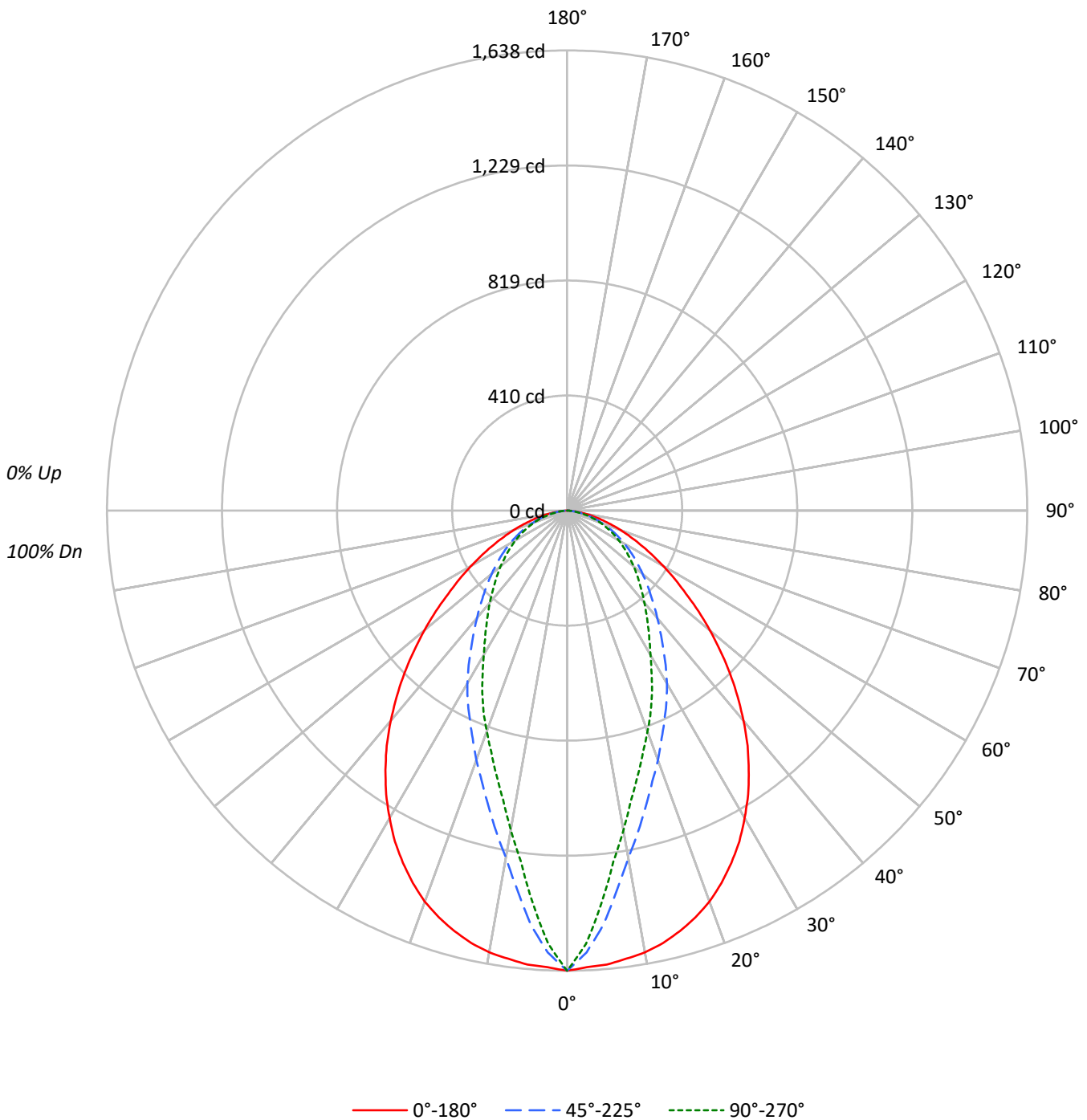
Lumens per Lamp: N/A
Luminaire Lumens: 2297.1 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 23.8
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

TEST NUMBER: P1217377

CATALOG NUMBER: S124DRP-H675D927-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217377

CATALOG NUMBER: S124DRP-H675D927-X4F0-XX-UDD-G-W

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°	14481	14481	14481
5°	14395	13134	12450
10°	14336	11260	10359
15°	14187	9935	8912
20°	13938	8889	7871
25°	13495	7999	6972
30°	12900	7253	6052
35°	12167	6430	5418
40°	11270	5760	4936
45°	10244	5239	4554
50°	9126	4821	4256
55°	7960	4479	3980
60°	6988	4170	3749
65°	6050	3847	3500
70°	5240	3487	3226
75°	4362	3081	2832
80°	3381	2495	2312
85°	2120	1684	1532

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10244 cd/sqm



TEST NUMBER: P1217377

CATALOG NUMBER: S124DRP-H675D927-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	6.0
10°-20°	325.7	14.2
20°-30°	416.2	18.1
30°-40°	422.7	18.4
40°-50°	374.7	16.3
50°-60°	294.4	12.8
60°-70°	200.5	8.7
70°-80°	102.9	4.5
80°-90°	22.8	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°	879.0	38.3
0°-40°	1301.7	56.7
0°-60°	1970.8	85.8
0°-90°	2297.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2297.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1638	1638	1638	1638	1638	
5°	1622	1581	1480	1423	1403	154
15°	1550	1294	1085	996	974	437
25°	1383	1014	820	741	715	636
35°	1127	768	596	520	502	703
45°	819	553	419	376	364	631
55°	516	368	291	265	258	466
65°	289	224	184	171	167	289
75°	128	105	90	86	83	137
85°	21	20	17	17	15	28
90°	0	0	0	0	0	



TEST NUMBER: P1217377

CATALOG NUMBER: S124DRP-H675D927-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1637.9	1637.9	1637.9	1637.9	1637.9
2.5°	1626.3	1628.5	1574.4	1554.9	1543.4
5°	1622.0	1580.9	1479.9	1423.0	1402.8
7.5°	1609.0	1519.6	1360.2	1281.6	1260.7
10°	1596.8	1449.6	1254.2	1176.3	1153.9
12.5°	1576.6	1372.5	1169.1	1079.7	1053.0
15°	1549.9	1293.9	1085.4	996.0	973.6
17.5°	1518.2	1218.9	1009.7	923.9	899.4
20°	1481.4	1149.6	944.8	856.8	836.6
22.5°	1435.2	1081.1	878.4	799.1	776.7
25°	1383.3	1014.0	820.0	741.4	714.7
27.5°	1327.8	949.1	765.9	678.7	650.5
30°	1263.6	887.1	710.4	618.8	592.8
32.5°	1198.7	825.8	652.0	565.4	544.5
35°	1127.3	768.1	595.7	520.0	502.0
37.5°	1055.1	712.6	545.2	478.9	463.0
40°	976.5	658.5	499.1	440.7	427.7
42.5°	897.9	604.4	457.3	406.8	394.5
45°	819.3	553.2	419.0	375.8	364.2
47.5°	740.0	502.7	383.7	345.5	336.1
50°	663.5	455.1	350.5	317.3	309.4
52.5°	589.2	410.4	318.8	290.6	282.0
55°	516.4	368.5	290.6	264.7	258.2
57.5°	454.4	329.6	262.5	240.2	235.1
60°	395.2	292.1	235.8	217.1	212.0
62.5°	339.7	257.5	209.2	194.0	190.4
65°	289.2	223.6	183.9	170.9	167.3
67.5°	243.0	192.6	157.9	148.6	145.7
70°	202.7	161.6	134.9	126.9	124.8
72.5°	162.3	132.0	111.8	106.0	103.9
75°	127.7	105.3	90.2	85.8	82.9
77.5°	95.9	80.1	69.2	65.6	63.5
80°	66.4	57.0	49.0	47.6	45.4
82.5°	41.8	36.1	31.7	31.0	28.8
85°	20.9	19.5	16.6	16.6	15.1
87.5°	7.2	6.5	6.5	6.5	5.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217377

CATALOG NUMBER: S124DRP-H675D927-X4F0-XX-UDD-G-W

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	18.19	19.68	18.56	19.99	20.31	15.52	17.00	15.88	17.32	17.63
	3H	19.78	21.12	20.16	21.45	21.81	17.12	18.45	17.49	18.78	19.14
	4H	20.31	21.56	20.71	21.91	22.29	17.67	18.92	18.07	19.27	19.65
	6H	20.65	21.80	21.06	22.17	22.56	18.03	19.18	18.44	19.55	19.94
	8H	20.72	21.82	21.15	22.21	22.61	18.11	19.21	18.54	19.60	20.00
	12H	20.75	21.80	21.18	22.18	22.61	18.15	19.20	18.58	19.58	20.01
4H	2H	18.42	19.67	18.82	20.02	20.40	16.19	17.44	16.59	17.79	18.17
	3H	20.20	21.24	20.61	21.64	22.04	17.98	19.02	18.39	19.42	19.82
	4H	20.84	21.78	21.28	22.19	22.63	18.64	19.58	19.08	19.99	20.43
	6H	21.29	22.10	21.75	22.54	23.00	19.10	19.91	19.56	20.35	20.81
	8H	21.40	22.16	21.87	22.60	23.07	19.22	19.97	19.68	20.42	20.88
	12H	21.46	22.13	21.94	22.61	23.08	19.28	19.95	19.76	20.43	20.90
8H	4H	20.95	21.70	21.41	22.15	22.62	18.94	19.70	19.41	20.14	20.61
	6H	21.47	22.09	21.96	22.58	23.06	19.49	20.11	19.99	20.61	21.08
	8H	21.62	22.18	22.14	22.69	23.18	19.66	20.22	20.17	20.73	21.22
	12H	21.72	22.21	22.23	22.71	23.27	19.77	20.26	20.28	20.75	21.32
12H	4H	20.94	21.61	21.42	22.09	22.56	18.97	19.64	19.45	20.12	20.59
	6H	21.46	22.02	21.97	22.53	23.02	19.53	20.09	20.04	20.60	21.09
	8H	21.65	22.14	22.16	22.64	23.20	19.74	20.23	20.25	20.73	21.29