

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: P1217424

Luminaire Tested: S124DRP-S675D935-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217424
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-S675D935-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

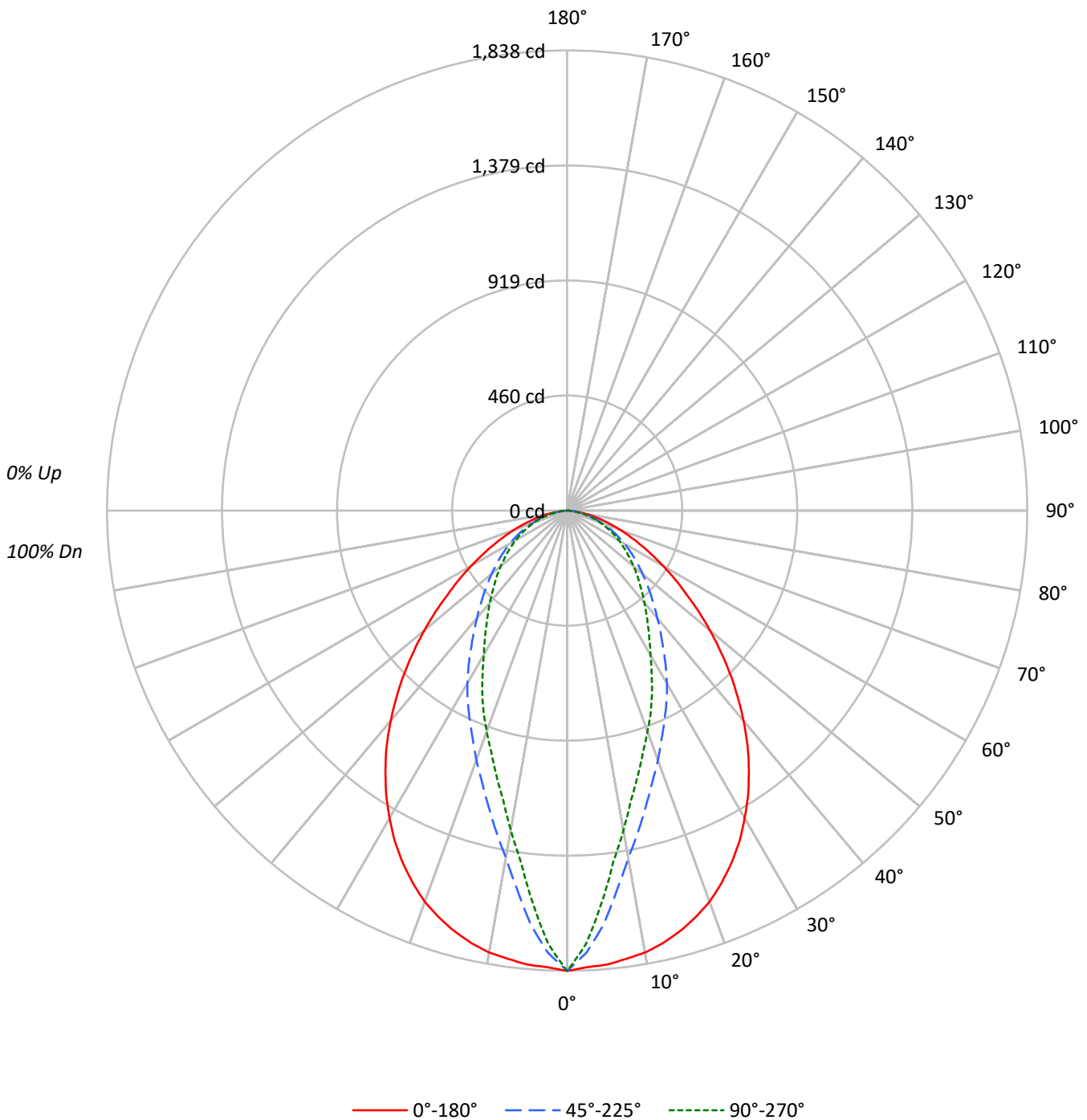
Lumens per Lamp: N/A
Luminaire Lumens: 2578.2 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1217424

CATALOG NUMBER: S124DRP-S675D935-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217424

CATALOG NUMBER: S124DRP-S675D935-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	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°	16253	16253	16253
5°	16157	14742	13973
10°	16090	12638	11628
15°	15923	11151	10003
20°	15644	9977	8835
25°	15146	8979	7826
30°	14479	8140	6793
35°	13656	7216	6081
40°	12650	6466	5540
45°	11498	5880	5111
50°	10243	5411	4777
55°	8934	5028	4467
60°	7844	4681	4208
65°	6791	4318	3929
70°	5881	3914	3619
75°	4895	3457	3180
80°	3793	2800	2597
85°	2384	1887	1725

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11498 cd/sqm



TEST NUMBER: P1217424

CATALOG NUMBER: S124DRP-S675D935-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.9	6.0
10°-20°	365.6	14.2
20°-30°	467.1	18.1
30°-40°	474.4	18.4
40°-50°	420.6	16.3
50°-60°	330.5	12.8
60°-70°	225.0	8.7
70°-80°	115.5	4.5
80°-90°	25.6	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°	986.5	38.3
0°-40°	1461.0	56.7
0°-60°	2212.0	85.8
0°-90°	2578.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2578.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1838	1838	1838	1838	1838	
5°	1820	1774	1661	1597	1574	173
15°	1740	1452	1218	1118	1093	490
25°	1553	1138	920	832	802	713
35°	1265	862	669	584	563	789
45°	920	621	470	422	409	708
55°	580	414	326	297	290	523
65°	325	251	206	192	188	325
75°	143	118	101	96	93	154
85°	24	22	19	19	17	31
90°	0	0	0	0	0	



TEST NUMBER: P1217424

CATALOG NUMBER: S124DRP-S675D935-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1838.3	1838.3	1838.3	1838.3	1838.3
2.5°	1825.4	1827.8	1767.1	1745.2	1732.3
5°	1820.5	1774.4	1661.0	1597.1	1574.4
7.5°	1805.9	1705.6	1526.7	1438.4	1415.0
10°	1792.2	1627.0	1407.7	1320.2	1295.2
12.5°	1769.5	1540.4	1312.2	1211.8	1181.8
15°	1739.6	1452.2	1218.3	1117.9	1092.8
17.5°	1703.9	1368.0	1133.3	1036.9	1009.4
20°	1662.7	1290.3	1060.4	961.7	939.0
22.5°	1610.8	1213.4	985.9	896.9	871.8
25°	1552.6	1138.1	920.4	832.1	802.2
27.5°	1490.2	1065.3	859.7	761.7	730.1
30°	1418.2	995.6	797.3	694.5	665.4
32.5°	1345.3	926.8	731.8	634.6	611.2
35°	1265.2	862.1	668.6	583.6	563.4
37.5°	1184.3	799.8	612.0	537.5	519.7
40°	1096.0	739.0	560.2	494.6	480.0
42.5°	1007.8	678.3	513.2	456.5	442.8
45°	919.6	620.9	470.3	421.7	408.8
47.5°	830.5	564.2	430.6	387.7	377.2
50°	744.7	510.8	393.4	356.2	347.3
52.5°	661.3	460.6	357.8	326.2	316.5
55°	579.6	413.6	326.2	297.1	289.8
57.5°	510.0	369.9	294.6	269.6	263.9
60°	443.6	327.8	264.7	243.7	238.0
62.5°	381.3	289.0	234.7	217.7	213.7
65°	324.6	250.9	206.4	191.8	187.8
67.5°	272.8	216.1	177.3	166.8	163.5
70°	227.5	181.3	151.4	142.5	140.0
72.5°	182.1	148.1	125.5	119.0	116.6
75°	143.3	118.2	101.2	96.3	93.1
77.5°	107.7	89.9	77.7	73.7	71.2
80°	74.5	63.9	55.0	53.4	51.0
82.5°	46.9	40.5	35.6	34.8	32.4
85°	23.5	21.9	18.6	18.6	17.0
87.5°	8.1	7.3	7.3	7.3	6.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217424
 CATALOG NUMBER: S124DRP-S675D935-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	18.59	20.08	18.96	20.39	20.71	15.92	17.41	16.28	17.72	18.03
	3H	20.18	21.52	20.56	21.85	22.21	17.52	18.85	17.89	19.18	19.54
	4H	20.71	21.96	21.11	22.31	22.69	18.07	19.32	18.47	19.67	20.05
	6H	21.05	22.20	21.46	22.57	22.96	18.43	19.58	18.84	19.95	20.34
	8H	21.12	22.22	21.55	22.61	23.01	18.52	19.61	18.94	20.00	20.41
	12H	21.15	22.20	21.58	22.59	23.02	18.55	19.60	18.98	19.99	20.42
4H	2H	18.82	20.07	19.22	20.42	20.80	16.59	17.84	16.99	18.19	18.57
	3H	20.60	21.64	21.01	22.04	22.44	18.38	19.42	18.79	19.82	20.22
	4H	21.24	22.18	21.68	22.59	23.03	19.04	19.98	19.48	20.39	20.83
	6H	21.69	22.50	22.15	22.94	23.40	19.50	20.31	19.96	20.75	21.21
	8H	21.80	22.56	22.27	23.00	23.47	19.62	20.37	20.08	20.82	21.29
	12H	21.86	22.53	22.34	23.01	23.49	19.68	20.35	20.16	20.83	21.30
8H	4H	21.35	22.10	21.81	22.55	23.02	19.34	20.10	19.81	20.55	21.01
	6H	21.87	22.49	22.36	22.98	23.46	19.89	20.52	20.39	21.01	21.49
	8H	22.02	22.58	22.54	23.09	23.58	20.06	20.62	20.58	21.13	21.62
	12H	22.12	22.62	22.63	23.11	23.67	20.17	20.66	20.68	21.15	21.72
12H	4H	21.34	22.01	21.82	22.49	22.96	19.37	20.04	19.85	20.52	20.99
	6H	21.86	22.42	22.37	22.93	23.42	19.93	20.49	20.45	21.00	21.49
	8H	22.05	22.55	22.56	23.04	23.60	20.14	20.64	20.65	21.13	21.69