

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: P1217422

Luminaire Tested: S124DRP-S675D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217422
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-S675D927-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

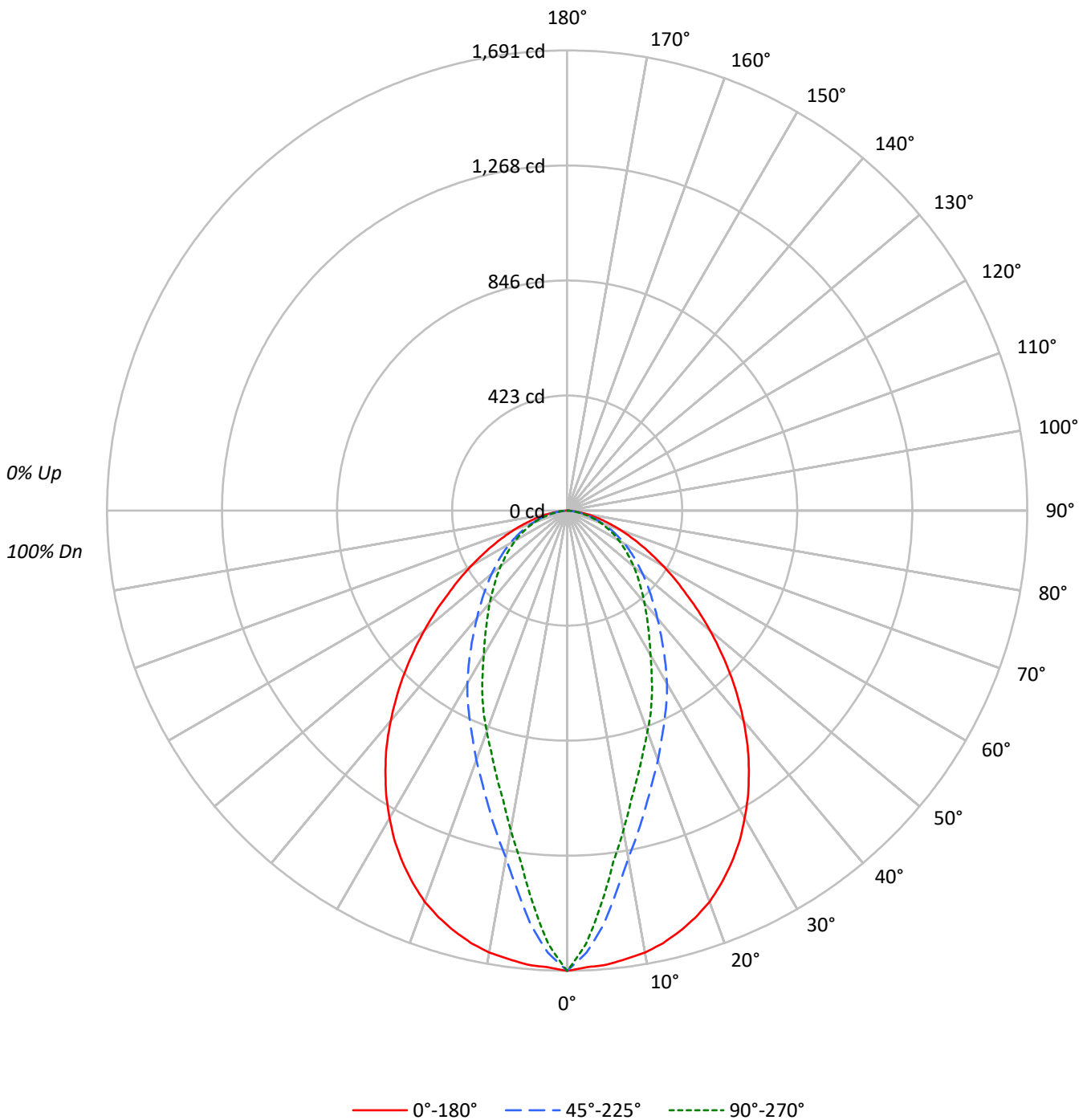
Lumens per Lamp: N/A
Luminaire Lumens: 2372.1 lumens
Efficiency: N/A
Efficacy: 89.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	14954	14954	14954
5°	14866	13564	12857
10°	14803	11628	10698
15°	14650	10260	9203
20°	14394	9180	8128
25°	13936	8261	7200
30°	13321	7489	6250
35°	12565	6640	5595
40°	11639	5949	5097
45°	10579	5410	4703
50°	9425	4979	4395
55°	8221	4626	4109
60°	7216	4306	3873
65°	6249	3973	3615
70°	5411	3601	3330
75°	4502	3180	2924
80°	3488	2576	2388
85°	2191	1735	1583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10579 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	6.0
10°-20°	336.3	14.2
20°-30°	429.8	18.1
30°-40°	436.5	18.4
40°-50°	386.9	16.3
50°-60°	304.1	12.8
60°-70°	207.0	8.7
70°-80°	106.3	4.5
80°-90°	23.5	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°	907.7	38.3
0°-40°	1344.2	56.7
0°-60°	2035.2	85.8
0°-90°	2372.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2372.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1691	1691	1691	1691	1691	
5°	1675	1632	1528	1469	1449	159
15°	1600	1336	1121	1028	1005	451
25°	1428	1047	847	766	738	656
35°	1164	793	615	537	518	726
45°	846	571	433	388	376	652
55°	533	381	300	273	267	482
65°	299	231	190	176	173	299
75°	132	109	93	89	86	142
85°	22	20	17	17	16	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1691.4	1691.4	1691.4	1691.4	1691.4
2.5°	1679.5	1681.7	1625.8	1605.7	1593.8
5°	1675.0	1632.5	1528.3	1469.4	1448.6
7.5°	1661.6	1569.2	1404.6	1323.5	1301.9
10°	1648.9	1497.0	1295.2	1214.7	1191.6
12.5°	1628.1	1417.3	1207.3	1114.9	1087.4
15°	1600.5	1336.1	1120.9	1028.5	1005.4
17.5°	1567.7	1258.7	1042.7	954.1	928.7
20°	1529.8	1187.2	975.7	884.8	863.9
22.5°	1482.1	1116.4	907.1	825.2	802.1
25°	1428.5	1047.1	846.8	765.6	738.1
27.5°	1371.1	980.1	790.9	700.8	671.8
30°	1304.8	916.1	733.6	639.0	612.2
32.5°	1237.8	852.8	673.3	583.9	562.3
35°	1164.1	793.2	615.2	537.0	518.4
37.5°	1089.6	735.8	563.0	494.5	478.1
40°	1008.4	680.0	515.4	455.1	441.6
42.5°	927.2	624.1	472.2	420.1	407.4
45°	846.1	571.2	432.7	388.0	376.1
47.5°	764.1	519.1	396.2	356.7	347.1
50°	685.2	470.0	362.0	327.7	319.5
52.5°	608.5	423.8	329.2	300.1	291.2
55°	533.3	380.6	300.1	273.3	266.6
57.5°	469.2	340.4	271.1	248.0	242.8
60°	408.1	301.6	243.5	224.2	219.0
62.5°	350.8	265.9	216.0	200.3	196.6
65°	298.7	230.9	189.9	176.5	172.8
67.5°	251.0	198.9	163.1	153.4	150.4
70°	209.3	166.8	139.3	131.1	128.8
72.5°	167.6	136.3	115.4	109.5	107.2
75°	131.8	108.7	93.1	88.6	85.6
77.5°	99.1	82.7	71.5	67.8	65.5
80°	68.5	58.8	50.6	49.2	46.9
82.5°	43.2	37.2	32.8	32.0	29.8
85°	21.6	20.1	17.1	17.1	15.6
87.5°	7.4	6.7	6.7	6.7	6.0
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	18.30	19.79	18.67	20.10	20.42	15.63	17.11	15.99	17.43	17.74
	3H	19.90	21.23	20.27	21.56	21.92	17.23	18.56	17.60	18.89	19.25
	4H	20.43	21.68	20.83	22.02	22.40	17.78	19.03	18.18	19.38	19.76
	6H	20.76	21.91	21.17	22.28	22.67	18.14	19.29	18.55	19.66	20.05
	8H	20.83	21.93	21.26	22.32	22.72	18.23	19.32	18.65	19.71	20.12
	12H	20.86	21.91	21.29	22.30	22.73	18.26	19.31	18.69	19.69	20.12
4H	2H	18.53	19.78	18.93	20.13	20.51	16.30	17.55	16.70	17.90	18.28
	3H	20.32	21.35	20.73	21.75	22.15	18.09	19.13	18.50	19.53	19.93
	4H	20.96	21.89	21.39	22.30	22.74	18.75	19.69	19.19	20.10	20.54
	6H	21.40	22.21	21.86	22.65	23.12	19.21	20.02	19.67	20.46	20.92
	8H	21.51	22.27	21.98	22.71	23.18	19.33	20.08	19.79	20.53	21.00
	12H	21.57	22.25	22.05	22.72	23.20	19.39	20.06	19.87	20.54	21.01
8H	4H	21.06	21.82	21.52	22.26	22.73	19.05	19.81	19.52	20.25	20.72
	6H	21.58	22.20	22.07	22.69	23.17	19.60	20.23	20.10	20.72	21.20
	8H	21.73	22.29	22.25	22.80	23.29	19.77	20.33	20.29	20.84	21.33
	12H	21.83	22.33	22.34	22.82	23.38	19.88	20.37	20.39	20.86	21.43
12H	4H	21.05	21.72	21.53	22.20	22.68	19.08	19.75	19.56	20.23	20.70
	6H	21.57	22.13	22.09	22.64	23.13	19.64	20.20	20.16	20.71	21.20
	8H	21.76	22.26	22.27	22.75	23.31	19.85	20.35	20.36	20.84	21.40