

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: P1217392

Luminaire Tested: S124DRP-S1005D835-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217392
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-S1005D835-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

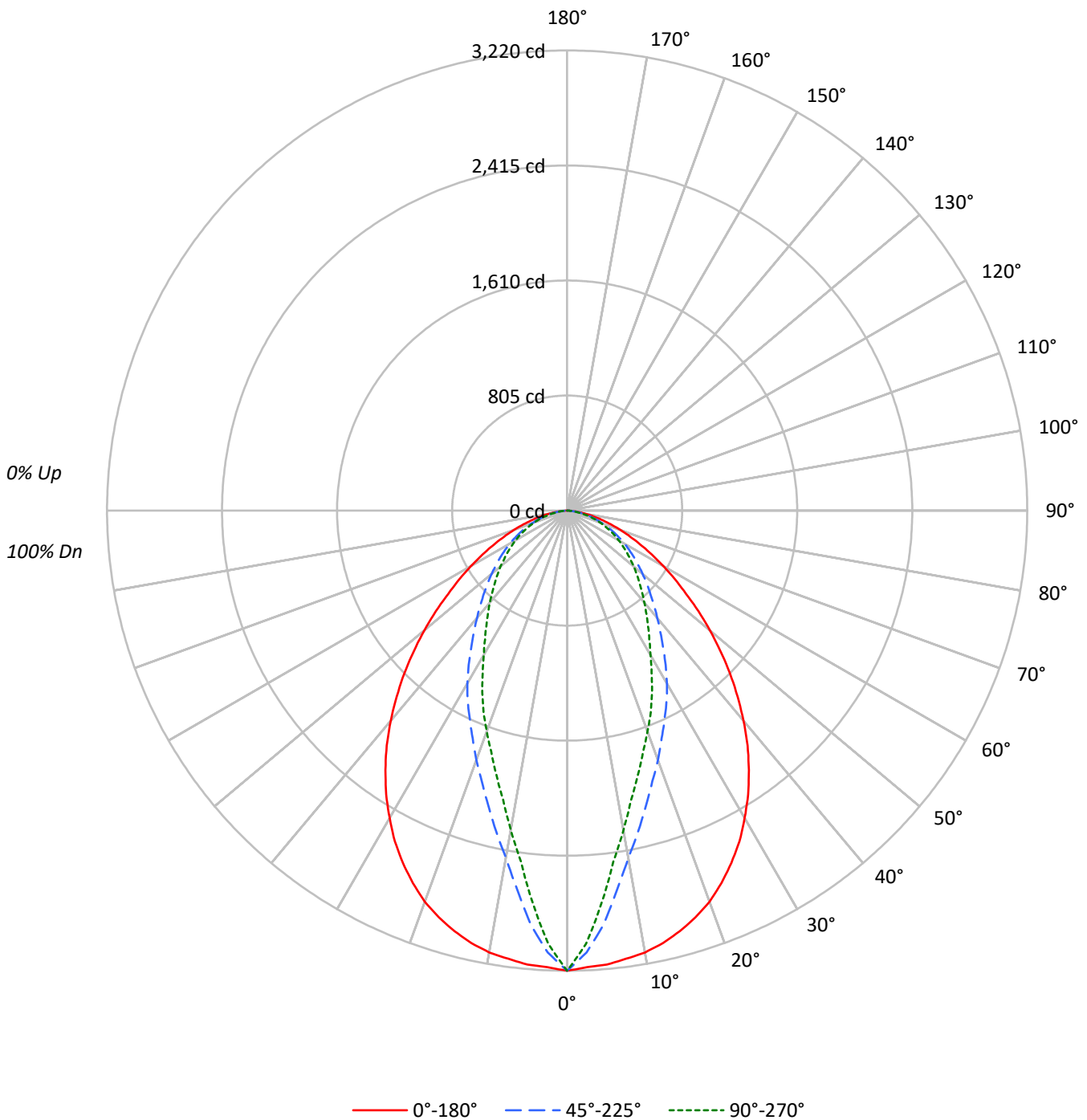
Lumens per Lamp: N/A
Luminaire Lumens: 4516.0 lumens
Efficiency: N/A
Efficacy: 107.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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: P1217392

CATALOG NUMBER: S124DRP-S1005D835-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





TEST NUMBER: P1217392

CATALOG NUMBER: S124DRP-S1005D835-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°	28469	28469	28469
5°	28301	25822	24476
10°	28183	22136	20367
15°	27891	19532	17521
20°	27402	17476	15476
25°	26530	15727	13707
30°	25362	14258	11899
35°	23920	12641	10652
40°	22158	11325	9704
45°	20140	10300	8953
50°	17943	9478	8367
55°	15649	8808	7824
60°	13739	8199	7372
65°	11895	7565	6883
70°	10299	6853	6341
75°	8574	6053	5572
80°	6639	4908	4547
85°	4169	3307	3023

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20140 cd/sqm



TEST NUMBER: P1217392

CATALOG NUMBER: S124DRP-S1005D835-X4F0-XX-UDD-G-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.5	6.0
10°-20°	640.3	14.2
20°-30°	818.2	18.1
30°-40°	831.0	18.4
40°-50°	736.7	16.3
50°-60°	578.9	12.8
60°-70°	394.2	8.7
70°-80°	202.4	4.5
80°-90°	44.9	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°	1728.1	38.3
0°-40°	2559.1	56.7
0°-60°	3874.6	85.8
0°-90°	4516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4516.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3220	3220	3220	3220	3220	
5°	3189	3108	2910	2798	2758	303
15°	3047	2544	2134	1958	1914	858
25°	2720	1994	1612	1458	1405	1250
35°	2216	1510	1171	1022	987	1383
45°	1611	1088	824	739	716	1241
55°	1015	724	571	520	508	917
65°	569	440	362	336	329	569
75°	251	207	177	169	163	270
85°	41	38	33	33	30	55
90°	0	0	0	0	0	



TEST NUMBER: P1217392

CATALOG NUMBER: S124DRP-S1005D835-X4F0-XX-UDD-G-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3220.0	3220.0	3220.0	3220.0	3220.0
2.5°	3197.4	3201.6	3095.3	3057.0	3034.3
5°	3188.8	3108.0	2909.5	2797.5	2757.8
7.5°	3163.3	2987.5	2674.2	2519.6	2478.5
10°	3139.2	2850.0	2465.7	2312.6	2268.6
12.5°	3099.5	2698.3	2298.4	2122.6	2070.1
15°	3047.1	2543.7	2133.9	1958.1	1914.2
17.5°	2984.7	2396.2	1985.1	1816.3	1768.1
20°	2912.4	2260.1	1857.4	1684.5	1644.8
22.5°	2821.6	2125.4	1727.0	1571.0	1527.1
25°	2719.5	1993.6	1612.1	1457.6	1405.1
27.5°	2610.3	1866.0	1505.8	1334.2	1278.9
30°	2484.2	1744.0	1396.6	1216.6	1165.5
32.5°	2356.5	1623.5	1281.8	1111.6	1070.5
35°	2216.2	1510.1	1171.2	1022.3	986.9
37.5°	2074.4	1400.9	1071.9	941.5	910.3
40°	1919.8	1294.5	981.2	866.3	840.8
42.5°	1765.3	1188.2	898.9	799.7	775.6
45°	1610.7	1087.5	823.8	738.7	716.0
47.5°	1454.8	988.3	754.3	679.2	660.7
50°	1304.5	894.7	689.1	623.9	608.3
52.5°	1158.4	806.8	626.7	571.4	554.4
55°	1015.2	724.5	571.4	520.4	507.6
57.5°	893.3	648.0	516.1	472.2	462.2
60°	777.0	574.2	463.7	426.8	416.9
62.5°	667.8	506.2	411.2	381.4	374.3
65°	568.6	439.5	361.6	336.0	329.0
67.5°	477.8	378.6	310.5	292.1	286.4
70°	398.4	317.6	265.1	249.5	245.3
72.5°	319.0	259.5	219.8	208.4	204.2
75°	251.0	207.0	177.2	168.7	163.1
77.5°	188.6	157.4	136.1	129.0	124.8
80°	130.4	112.0	96.4	93.6	89.3
82.5°	82.2	70.9	62.4	61.0	56.7
85°	41.1	38.3	32.6	32.6	29.8
87.5°	14.2	12.8	12.8	12.8	11.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1217392
 CATALOG NUMBER: S124DRP-S1005D835-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	20.54	22.03	20.90	22.34	22.65	17.87	19.35	18.23	19.67	19.98
	3H	22.13	23.47	22.51	23.79	24.16	19.46	20.80	19.84	21.12	21.49
	4H	22.66	23.91	23.06	24.26	24.64	20.02	21.27	20.42	21.62	22.00
	6H	22.99	24.15	23.41	24.51	24.91	20.38	21.53	20.79	21.90	22.29
	8H	23.07	24.17	23.50	24.56	24.96	20.46	21.56	20.89	21.95	22.35
	12H	23.10	24.15	23.53	24.53	24.96	20.50	21.55	20.93	21.93	22.36
4H	2H	20.77	22.02	21.17	22.37	22.75	18.54	19.79	18.94	20.14	20.52
	3H	22.55	23.59	22.96	23.99	24.39	20.33	21.36	20.74	21.77	22.17
	4H	23.19	24.12	23.62	24.54	24.98	20.99	21.92	21.42	22.34	22.78
	6H	23.64	24.45	24.10	24.89	25.35	21.45	22.26	21.91	22.70	23.16
	8H	23.75	24.51	24.21	24.95	25.42	21.56	22.32	22.03	22.77	23.23
	12H	23.81	24.48	24.29	24.96	25.43	21.63	22.30	22.11	22.78	23.25
8H	4H	23.30	24.05	23.76	24.50	24.96	21.29	22.05	21.76	22.49	22.96
	6H	23.81	24.44	24.31	24.93	25.41	21.84	22.46	22.34	22.96	23.43
	8H	23.97	24.53	24.48	25.04	25.53	22.01	22.57	22.52	23.08	23.57
	12H	24.07	24.56	24.58	25.05	25.62	22.12	22.61	22.63	23.10	23.67
12H	4H	23.29	23.96	23.77	24.44	24.91	21.31	21.99	21.80	22.47	22.94
	6H	23.81	24.37	24.32	24.88	25.37	21.88	22.44	22.39	22.95	23.44
	8H	24.00	24.49	24.51	24.99	25.55	22.09	22.58	22.60	23.08	23.64