

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P997734

Luminaire Tested: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997734
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K
Description: Define 2 Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

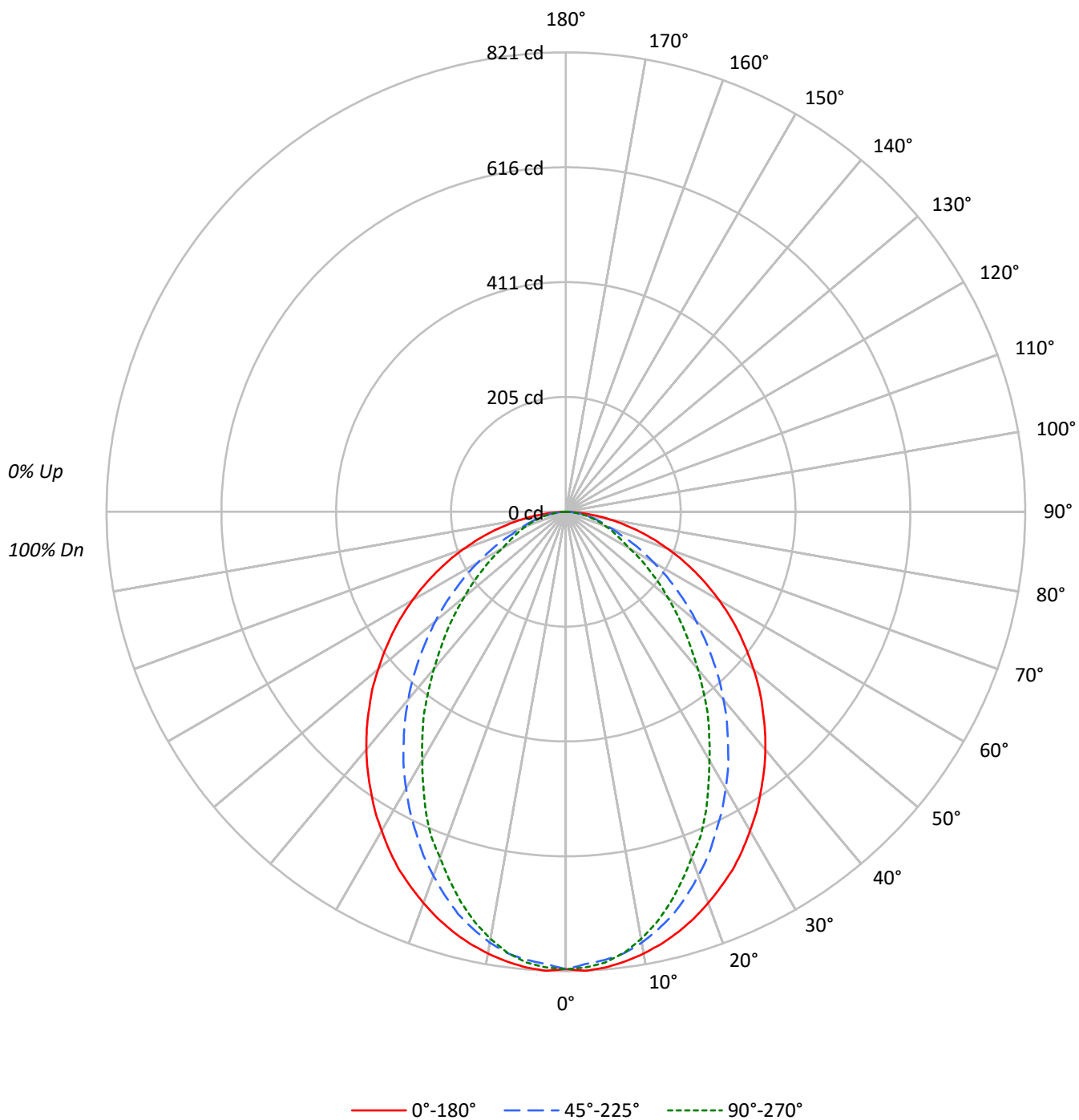
Lumens per Lamp: N/A
Luminaire Lumens: 1681.0 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V):
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: P997734

CATALOG NUMBER: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K

Luminous Intensity Polar Plot





TEST NUMBER: P997734

CATALOG NUMBER: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			
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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74		
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64		
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55		
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49		
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43		
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39		
8	64	51	43	38	62	51	43	37	49	42	37	48	42	37	47	41	37	35		
9	60	47	39	34	59	47	39	34	46	39	34	44	38	34	44	38	34	32		
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12939	12939	12939
5°	12988	12775	12847
10°	12888	12568	12460
15°	12740	12194	11843
20°	12534	11662	11077
25°	12326	11059	10336
30°	12032	10437	9382
35°	11749	9762	8547
40°	11464	9063	7581
45°	11128	8278	6707
50°	10784	7486	5846
55°	10432	6634	5023
60°	10023	5737	4169
65°	9559	4820	3794
70°	9002	3971	3490
75°	8324	3621	3260
80°	7347	3236	2963
85°	5776	2561	2561

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11128 cd/sqm

TEST NUMBER: P997734

CATALOG NUMBER: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.6	4.6
10°-20°	210.3	12.5
20°-30°	295.2	17.6
30°-40°	321.8	19.1
40°-50°	295.8	17.6
50°-60°	232.3	13.8
60°-70°	151.2	9.0
70°-80°	77.8	4.6
80°-90°	19.9	1.2
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°	582.1	34.6
0°-40°	904.0	53.8
0°-60°	1432.1	85.2
0°-90°	1681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	817	817	817	817	817	
5°	817	814	804	811	808	78
15°	777	769	744	730	723	219
25°	706	682	633	603	592	325
35°	608	570	505	459	442	381
45°	497	448	370	317	300	384
55°	378	320	240	196	182	338
65°	255	195	129	104	101	253
75°	136	84	59	54	53	144
85°	32	16	14	14	14	38
90°	0	0	0	0	0	

TEST NUMBER: P997734

CATALOG NUMBER: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	817.4	817.4	817.4	817.4	817.4
2.5°	821.1	817.4	809.2	816.6	815.1
5°	817.4	813.7	804.0	810.7	808.5
7.5°	810.7	806.3	795.9	798.9	795.2
10°	801.8	796.6	781.9	779.6	775.2
12.5°	790.7	784.1	764.1	759.7	751.5
15°	777.4	769.3	744.1	730.1	722.7
17.5°	761.9	750.0	719.0	702.7	690.9
20°	744.1	729.3	692.3	673.9	657.6
22.5°	724.9	707.9	665.0	639.8	628.7
25°	705.7	682.0	633.2	602.8	591.8
27.5°	682.7	657.6	603.6	568.8	551.8
30°	658.3	630.2	571.0	533.3	513.3
32.5°	634.7	600.6	540.0	495.6	477.1
35°	608.0	570.3	505.2	458.6	442.3
37.5°	582.1	541.5	472.7	421.6	403.1
40°	554.8	510.4	438.6	386.1	366.9
42.5°	526.7	479.3	404.6	349.9	331.4
45°	497.1	447.5	369.8	317.3	299.6
47.5°	469.0	416.4	336.6	284.0	267.8
50°	437.9	385.4	304.0	253.0	237.4
52.5°	407.6	352.1	272.9	224.1	210.1
55°	378.0	320.3	240.4	196.0	182.0
57.5°	347.7	288.5	211.6	170.1	158.3
60°	316.6	257.4	181.2	143.5	131.7
62.5°	286.3	227.1	155.3	119.8	113.9
65°	255.2	195.3	128.7	103.6	101.3
67.5°	225.6	165.7	103.6	91.0	88.8
70°	194.5	136.8	85.8	78.4	75.4
72.5°	165.0	110.2	71.7	65.8	64.4
75°	136.1	84.3	59.2	54.0	53.3
77.5°	107.3	59.9	46.6	43.6	42.2
80°	80.6	42.9	35.5	32.5	32.5
82.5°	56.2	28.8	24.4	22.9	22.9
85°	31.8	16.3	14.1	14.1	14.1
87.5°	11.8	5.9	5.9	5.2	5.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P997734

CATALOG NUMBER: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_4000K

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	20.13	21.65	20.49	21.97	22.28	16.09	17.61	16.45	17.92	18.24
	3H	21.89	23.26	22.27	23.59	23.95	17.36	18.72	17.73	19.05	19.41
	4H	22.56	23.84	22.96	24.19	24.57	17.86	19.14	18.26	19.49	19.86
	6H	23.05	24.23	23.46	24.60	24.99	18.24	19.42	18.65	19.79	20.18
	8H	23.22	24.34	23.64	24.73	25.13	18.36	19.49	18.79	19.88	20.28
	12H	23.32	24.40	23.75	24.78	25.21	18.44	19.52	18.87	19.90	20.33
4H	2H	20.23	21.51	20.63	21.86	22.24	16.78	18.07	17.18	18.41	18.79
	3H	22.17	23.23	22.58	23.63	24.03	18.23	19.29	18.64	19.69	20.09
	4H	22.92	23.87	23.35	24.29	24.73	18.83	19.78	19.26	20.20	20.64
	6H	23.51	24.34	23.97	24.78	25.24	19.32	20.15	19.77	20.59	21.05
	8H	23.72	24.50	24.19	24.94	25.41	19.48	20.25	19.94	20.70	21.17
	12H	23.88	24.57	24.36	25.05	25.52	19.59	20.29	20.08	20.77	21.24
8H	4H	22.94	23.72	23.40	24.16	24.63	19.18	19.96	19.65	20.40	20.87
	6H	23.58	24.22	24.07	24.71	25.19	19.77	20.41	20.26	20.90	21.38
	8H	23.83	24.40	24.34	24.91	25.40	19.99	20.56	20.50	21.07	21.56
	12H	24.03	24.54	24.54	25.03	25.60	20.17	20.68	20.68	21.17	21.73
12H	4H	22.93	23.62	23.41	24.10	24.57	19.23	19.92	19.71	20.40	20.87
	6H	23.56	24.14	24.07	24.65	25.13	19.83	20.41	20.34	20.92	21.41
	8H	23.84	24.35	24.35	24.84	25.41	20.10	20.61	20.61	21.11	21.67