

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: P997609

Luminaire Tested: SA2XXDP-B485DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997609
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B485DB2750-4F0-XX-W2A-F_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

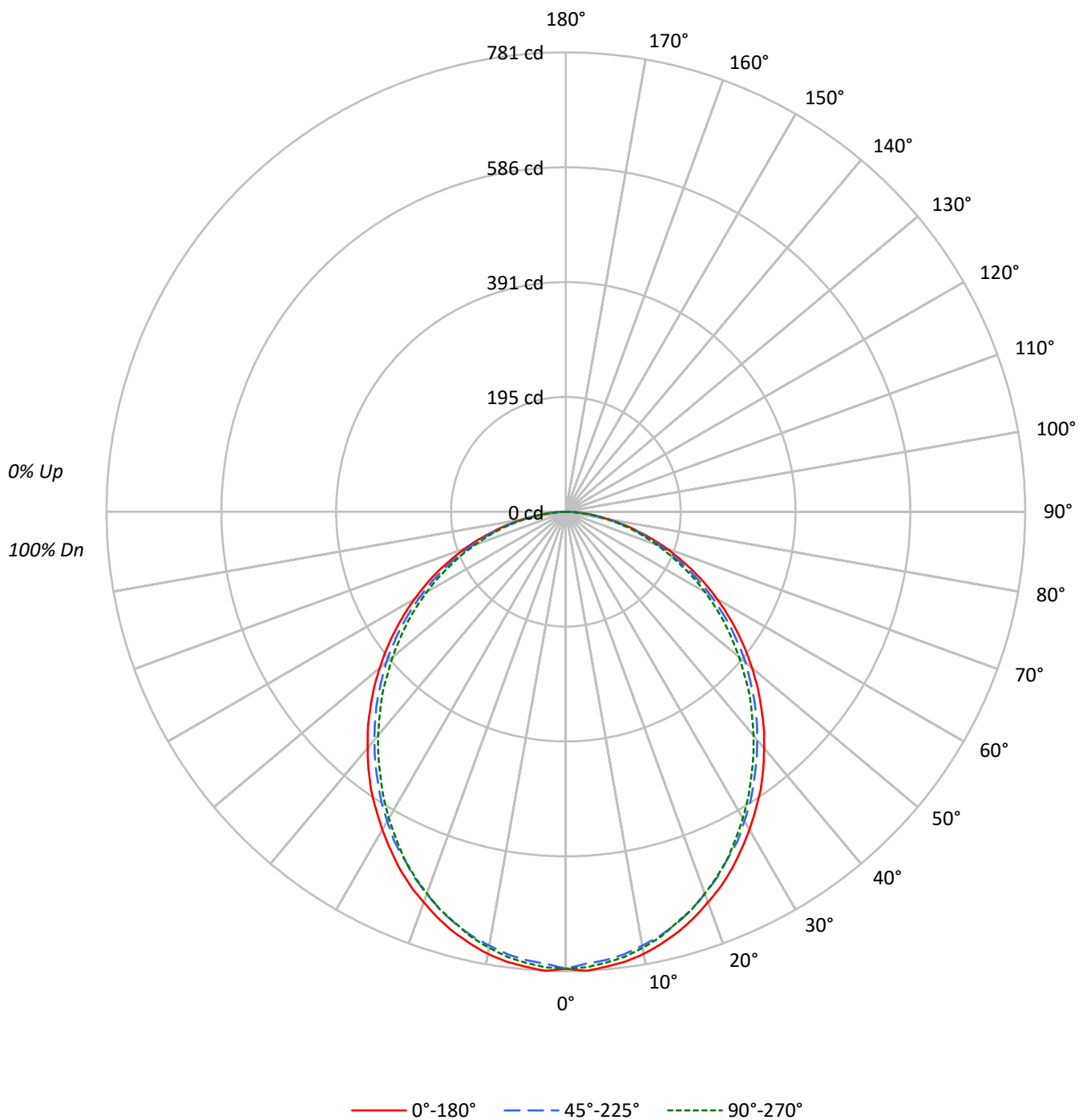
Lumens per Lamp: N/A
Luminaire Lumens: 1976.0 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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

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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	85	79	97	89	83	78	86	81	76		83	78	74		80
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		71
4	83	71	63	56	81	70	62	56	68	61	55		65	59	54		63
5	77	64	55	49	75	63	55	48	61	53	48		59	52	47		57
6	71	58	49	43	69	57	48	42	55	48	42		53	47	42		52
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12295	12295	12295
5°	12342	12164	12235
10°	12267	12039	12100
15°	12115	11884	11871
20°	11901	11648	11637
25°	11686	11361	11361
30°	11411	11098	11002
35°	11156	10781	10622
40°	10834	10462	10262
45°	10515	10148	9897
50°	10171	9821	9471
55°	9811	9438	9088
60°	9409	8985	8652
65°	8978	8532	8139
70°	8433	7984	7604
75°	7676	7351	7168
80°	6809	6600	6263
85°	5558	5285	4740

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10515 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	3.7
10°-20°	205.7	10.4
20°-30°	302.3	15.3
30°-40°	351.0	17.8
40°-50°	350.6	17.7
50°-60°	305.7	15.5
60°-70°	226.0	11.4
70°-80°	127.9	6.5
80°-90°	33.7	1.7
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°	581.0	29.4
0°-40°	932.1	47.2
0°-60°	1588.4	80.4
0°-90°	1976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	777	774	766	772	770	74
15°	739	735	725	728	724	208
25°	669	663	650	652	650	308
35°	577	570	558	553	550	360
45°	470	464	453	445	442	363
55°	356	351	342	333	329	318
65°	240	235	228	221	217	237
75°	126	124	120	116	117	134
85°	31	30	29	27	26	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	781.2	777.4	769.2	776.7	775.2
5°	776.7	773.7	765.5	771.5	770.0
7.5°	771.5	767.0	758.8	764.7	763.2
10°	763.2	758.0	749.0	755.0	752.8
12.5°	752.0	747.6	738.6	742.3	740.8
15°	739.3	734.9	725.2	728.1	724.4
17.5°	723.7	719.2	709.5	713.2	709.5
20°	706.5	702.0	691.5	693.8	690.8
22.5°	689.3	682.6	672.9	672.9	671.4
25°	669.1	663.2	650.5	652.0	650.5
27.5°	646.7	641.5	631.8	629.6	625.8
30°	624.3	618.4	607.2	604.9	601.9
32.5°	600.4	596.0	584.0	579.5	576.5
35°	577.3	569.8	557.9	553.4	549.7
37.5°	551.1	544.4	532.5	527.2	523.5
40°	524.3	518.3	506.3	499.6	496.6
42.5°	498.1	492.1	480.2	472.7	468.2
45°	469.7	464.5	453.3	445.1	442.1
47.5°	442.1	436.9	424.9	416.7	412.2
50°	413.0	409.3	398.8	388.3	384.6
52.5°	384.6	379.4	369.7	361.5	356.2
55°	355.5	351.0	342.0	333.1	329.3
57.5°	326.4	322.6	312.9	304.0	301.0
60°	297.2	294.2	283.8	275.6	273.3
62.5°	268.9	263.6	256.2	248.7	245.7
65°	239.7	235.2	227.8	221.1	217.3
67.5°	209.9	206.1	199.4	194.2	191.2
70°	182.2	179.2	172.5	167.3	164.3
72.5°	153.8	150.9	147.1	141.9	139.7
75°	125.5	124.0	120.2	115.8	117.2
77.5°	100.1	97.1	95.6	93.4	91.1
80°	74.7	73.9	72.4	70.2	68.7
82.5°	50.8	50.8	50.0	47.0	47.0
85°	30.6	29.9	29.1	26.9	26.1
87.5°	13.4	11.9	10.5	8.2	7.5
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	20.00	21.61	20.36	21.92	22.24	19.56	21.17	19.92	21.48	21.80
	3H	21.75	23.20	22.13	23.53	23.89	21.26	22.71	21.64	23.04	23.40
	4H	22.40	23.77	22.79	24.11	24.49	21.90	23.27	22.30	23.62	24.00
	6H	22.87	24.13	23.28	24.50	24.89	22.36	23.63	22.78	24.00	24.39
	8H	23.01	24.22	23.43	24.61	25.01	22.51	23.72	22.93	24.11	24.50
	12H	23.10	24.26	23.53	24.64	25.07	22.59	23.75	23.02	24.13	24.56
4H	2H	20.56	21.93	20.96	22.28	22.65	20.21	21.58	20.61	21.93	22.30
	3H	22.54	23.68	22.94	24.08	24.48	22.13	23.28	22.54	23.67	24.07
	4H	23.31	24.35	23.74	24.76	25.20	22.89	23.92	23.32	24.34	24.77
	6H	23.91	24.81	24.36	25.25	25.71	23.48	24.38	23.93	24.82	25.28
	8H	24.10	24.94	24.56	25.39	25.85	23.66	24.51	24.12	24.95	25.41
	12H	24.23	24.99	24.71	25.47	25.94	23.78	24.54	24.26	25.01	25.48
8H	4H	23.59	24.43	24.05	24.87	25.34	23.21	24.06	23.67	24.50	24.97
	6H	24.30	25.00	24.79	25.49	25.97	23.92	24.62	24.41	25.11	25.59
	8H	24.56	25.19	25.07	25.70	26.18	24.17	24.80	24.68	25.30	25.79
	12H	24.76	25.32	25.27	25.81	26.37	24.35	24.90	24.85	25.39	25.96
12H	4H	23.61	24.37	24.09	24.85	25.32	23.25	24.01	23.73	24.48	24.95
	6H	24.34	24.98	24.85	25.48	25.97	23.98	24.61	24.49	25.12	25.60
	8H	24.66	25.22	25.17	25.71	26.27	24.28	24.84	24.79	25.33	25.89