

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: P997733

Luminaire Tested: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997733
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_3500K
Description: Define 2 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

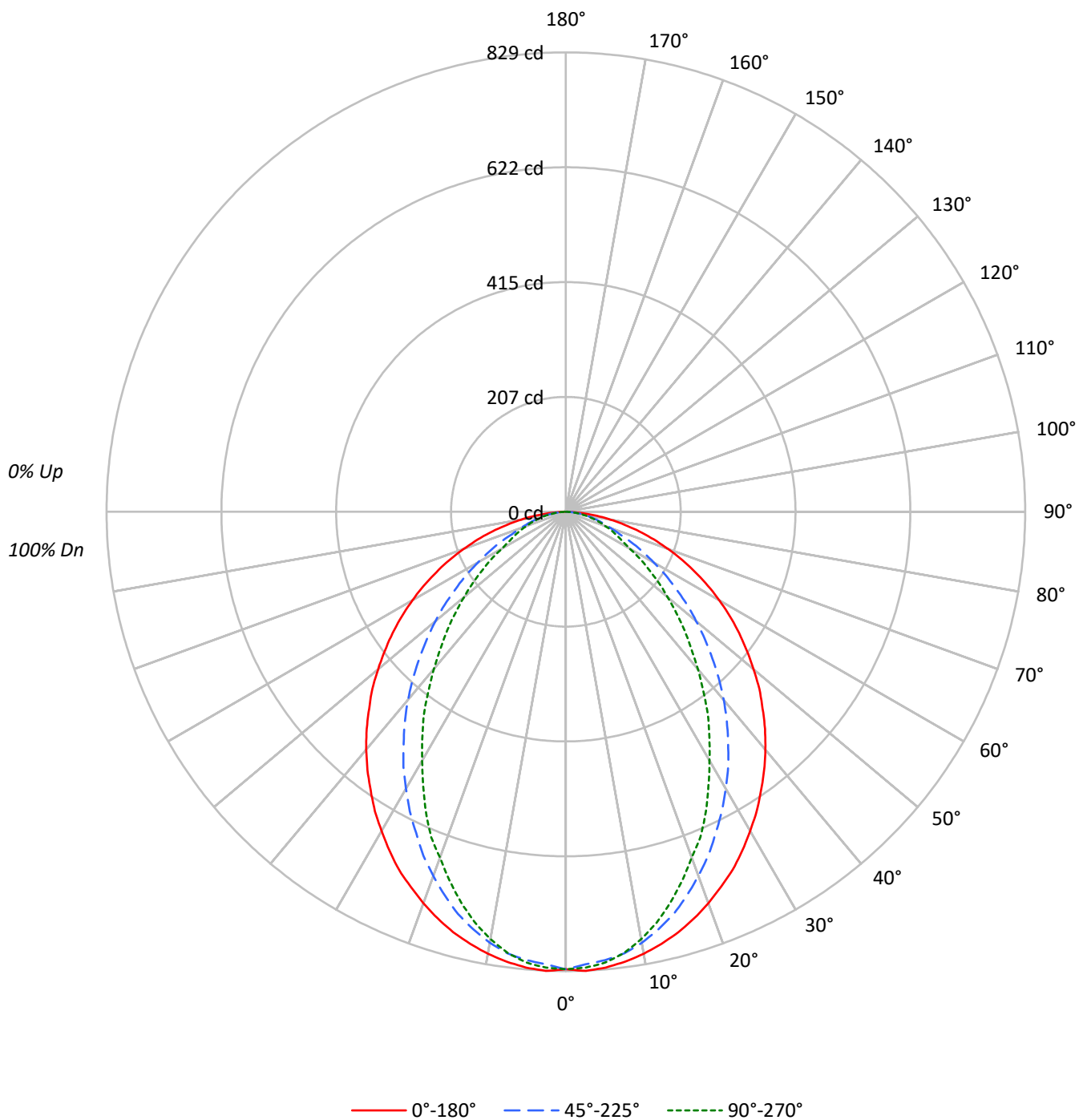
Lumens per Lamp: N/A
Luminaire Lumens: 1698.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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: P997733

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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	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13069	13069	13069
5°	13119	12906	12977
10°	13018	12695	12586
15°	12869	12319	11963
20°	12663	11782	11189
25°	12450	11171	10439
30°	12155	10543	9477
35°	11869	9861	8634
40°	11580	9156	7658
45°	11240	8363	6774
50°	10892	7563	5905
55°	10537	6701	5072
60°	10124	5797	4211
65°	9656	4869	3835
70°	9094	4013	3527
75°	8409	3657	3290
80°	7420	3273	2999
85°	5830	2579	2579

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11240 cd/sqm

TEST NUMBER: P997733

CATALOG NUMBER: SA2XXRDP-B485DB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.4	4.6
10°-20°	212.4	12.5
20°-30°	298.2	17.6
30°-40°	325.1	19.1
40°-50°	298.8	17.6
50°-60°	234.7	13.8
60°-70°	152.7	9.0
70°-80°	78.6	4.6
80°-90°	20.1	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°	588.0	34.6
0°-40°	913.1	53.8
0°-60°	1446.5	85.2
0°-90°	1698.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1698.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	826	822	812	819	817	78
15°	785	777	752	738	730	221
25°	713	689	640	609	598	328
35°	614	576	510	463	447	384
45°	502	452	374	320	303	388
55°	382	324	243	198	184	341
65°	258	197	130	105	102	256
75°	138	85	60	54	54	145
85°	32	16	14	14	14	39
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	825.6	825.6	825.6	825.6	825.6
2.5°	829.4	825.6	817.4	824.9	823.4
5°	825.6	821.9	812.2	818.9	816.7
7.5°	818.9	814.4	804.0	806.9	803.2
10°	809.9	804.7	789.8	787.5	783.0
12.5°	798.7	792.0	771.8	767.3	759.1
15°	785.3	777.1	751.7	737.5	730.0
17.5°	769.6	757.6	726.2	709.8	697.9
20°	751.7	736.7	699.4	680.7	664.2
22.5°	732.2	715.0	671.7	646.3	635.1
25°	712.8	688.9	639.6	608.9	597.7
27.5°	689.6	664.2	609.7	574.6	557.4
30°	665.0	636.6	576.8	538.7	518.5
32.5°	641.1	606.7	545.4	500.6	481.9
35°	614.2	576.1	510.3	463.2	446.8
37.5°	588.0	546.9	477.4	425.9	407.2
40°	560.4	515.5	443.1	390.0	370.6
42.5°	532.0	484.2	408.7	353.4	334.7
45°	502.1	452.0	373.6	320.5	302.6
47.5°	473.7	420.7	340.0	286.9	270.5
50°	442.3	389.3	307.1	255.5	239.8
52.5°	411.7	355.7	275.7	226.4	212.2
55°	381.8	323.5	242.8	198.0	183.8
57.5°	351.2	291.4	213.7	171.8	159.9
60°	319.8	260.0	183.1	145.0	133.0
62.5°	289.2	229.4	156.9	121.0	115.1
65°	257.8	197.3	130.0	104.6	102.4
67.5°	227.9	167.4	104.6	91.9	89.7
70°	196.5	138.2	86.7	79.2	76.2
72.5°	166.6	111.3	72.5	66.5	65.0
75°	137.5	85.2	59.8	54.5	53.8
77.5°	108.3	60.5	47.1	44.1	42.6
80°	81.4	43.3	35.9	32.9	32.9
82.5°	56.8	29.1	24.7	23.2	23.2
85°	32.1	16.4	14.2	14.2	14.2
87.5°	12.0	6.0	6.0	5.2	5.2
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	20.16	21.69	20.53	22.00	22.31	16.12	17.64	16.49	17.96	18.27
	3H	21.93	23.30	22.31	23.62	23.98	17.39	18.76	17.77	19.08	19.44
	4H	22.60	23.88	23.00	24.23	24.60	17.89	19.17	18.29	19.52	19.90
	6H	23.08	24.27	23.50	24.63	25.03	18.27	19.46	18.68	19.82	20.21
	8H	23.25	24.38	23.68	24.77	25.17	18.40	19.52	18.82	19.91	20.31
	12H	23.35	24.43	23.78	24.81	25.24	18.48	19.56	18.91	19.94	20.37
4H	2H	20.27	21.55	20.67	21.90	22.28	16.82	18.10	17.22	18.45	18.83
	3H	22.20	23.26	22.61	23.66	24.07	18.26	19.33	18.67	19.73	20.13
	4H	22.95	23.91	23.38	24.32	24.76	18.86	19.82	19.29	20.23	20.67
	6H	23.54	24.37	24.00	24.82	25.28	19.35	20.18	19.81	20.63	21.09
	8H	23.76	24.53	24.22	24.98	25.45	19.51	20.29	19.98	20.74	21.20
	12H	23.91	24.61	24.39	25.08	25.55	19.63	20.33	20.11	20.80	21.28
8H	4H	22.98	23.75	23.44	24.20	24.66	19.22	19.99	19.68	20.44	20.91
	6H	23.61	24.26	24.11	24.75	25.22	19.80	20.45	20.30	20.94	21.42
	8H	23.86	24.44	24.38	24.95	25.44	20.03	20.60	20.54	21.11	21.60
	12H	24.07	24.58	24.58	25.07	25.63	20.21	20.72	20.72	21.21	21.77
12H	4H	22.96	23.66	23.44	24.13	24.60	19.26	19.95	19.74	20.43	20.90
	6H	23.59	24.17	24.11	24.68	25.17	19.87	20.45	20.38	20.95	21.44
	8H	23.88	24.39	24.39	24.88	25.44	20.14	20.65	20.65	21.14	21.71

END OF REPORT