

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: P999185

Luminaire Tested: SA2XXDIP-B865D725UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999185
REPORT IS A COMBINATION OF REPORTS P984934 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D725UB35-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

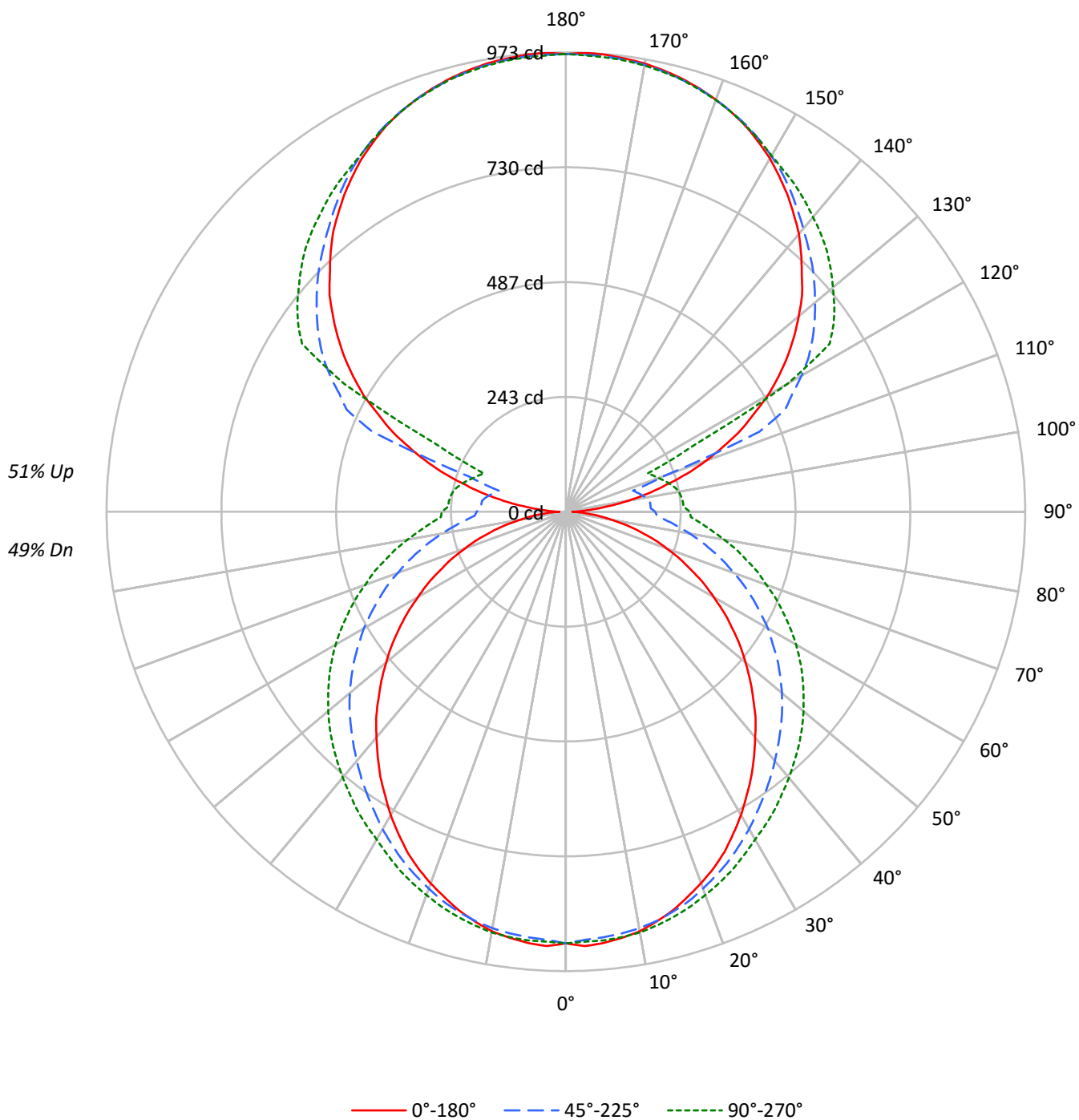
Lumens per Lamp: N/A
Luminaire Lumens: 6331.9 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	30	10
RCR																	
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	96	91	87	83	88	84	80	77	70	68	65	58	56	54	46	45	44
2	87	79	72	66	80	73	67	62	61	56	53	50	47	44	40	38	36
3	79	69	61	55	72	63	56	51	53	48	44	44	40	36	35	32	30
4	72	60	52	46	66	56	48	43	47	41	37	39	34	31	31	28	25
5	66	54	45	39	60	50	42	36	42	36	31	35	30	26	28	24	22
6	61	48	40	33	55	44	37	31	37	32	27	31	26	23	25	22	19
7	56	43	35	29	51	40	33	27	34	28	24	28	24	20	23	19	17
8	52	39	31	26	47	36	29	24	31	25	21	26	21	18	21	17	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	19	16	13
10	45	33	25	20	41	30	24	19	26	20	17	22	17	14	18	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14470	14470	14470
5°	14536	13853	13775
10°	14438	13373	13178
15°	14234	12876	12565
20°	13977	12355	11985
25°	13723	11856	11458
30°	13368	11348	10936
35°	13007	10860	10552
40°	12629	10437	10173
45°	12268	10054	9841
50°	11880	9701	9513
55°	11474	9326	9180
60°	10976	8935	8830
65°	10455	8485	8425
70°	9870	8002	7993
75°	9118	7519	7581
80°	7936	7018	7158
85°	6738	6544	6791

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12268 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.7	1.4
10°-20°	248.5	3.9
20°-30°	376.6	5.9
30°-40°	458.6	7.2
40°-50°	493.4	7.8
50°-60°	479.2	7.6
60°-70°	418.5	6.6
70°-80°	322.1	5.1
80°-90°	217.4	3.4
90°-100°	180.8	2.9
100°-110°	227.9	3.6
110°-120°	387.8	6.1
120°-130°	564.2	8.9
130°-140°	573.6	9.1
140°-150°	520.4	8.2
150°-160°	416.1	6.6
160°-170°	268.1	4.2
170°-180°	92.3	1.5
0°-30°	711.8	11.2
0°-40°	1170.4	18.5
0°-60°	2142.9	33.8
0°-90°	3100.8	49.0
90°-120°	796.5	12.6
90°-150°	2454.6	38.8
90°-180°	3231.0	51.0
0°-180°	6331.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	914	914	914	914	914	
5°	917	913	905	913	912	87
15°	874	877	877	889	888	246
25°	795	804	816	832	836	366
35°	685	708	733	762	771	428
45°	562	598	644	685	698	434
55°	431	478	547	595	612	385
65°	294	359	437	492	509	292
75°	163	237	322	379	396	172
85°	48	130	215	270	289	50
90°	14	98	189	245	263	12
95°	56	95	180	234	249	62
105°	220	279	157	211	228	235
115°	409	435	512	227	191	402
125°	573	582	638	678	692	511
135°	707	718	738	773	782	547
145°	819	818	830	843	846	512
155°	902	895	904	908	902	415
165°	950	946	948	953	948	268
175°	972	967	968	973	966	92
180°	970	970	970	970	970	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	914.1	914.1	914.1	914.1	914.1
2.5°	920.8	916.8	907.5	914.1	911.5
5°	916.8	912.8	904.9	912.8	911.5
7.5°	910.2	907.5	900.9	910.2	908.8
10°	902.2	899.6	895.6	906.2	904.9
12.5°	889.0	890.3	887.6	898.2	896.9
15°	874.4	877.0	877.0	889.0	887.6
17.5°	855.8	861.1	865.1	877.0	877.0
20°	837.3	843.9	849.2	863.8	863.8
22.5°	817.4	825.4	833.3	847.9	850.5
25°	794.9	804.2	816.1	832.0	836.0
27.5°	768.4	783.0	796.2	816.1	818.7
30°	741.9	759.1	776.3	797.5	801.5
32.5°	712.8	732.6	753.8	779.0	786.9
35°	684.9	707.5	732.6	761.8	771.0
37.5°	654.5	679.6	711.4	743.2	752.5
40°	624.0	653.1	688.9	723.4	735.3
42.5°	594.8	624.0	666.4	704.8	716.7
45°	561.7	597.5	643.9	684.9	698.2
47.5°	529.9	568.4	621.3	663.7	678.3
50°	496.8	537.9	597.5	642.5	657.1
52.5°	465.0	508.7	572.3	618.7	634.6
55°	430.6	478.3	547.2	594.8	612.1
57.5°	397.4	450.4	519.3	571.0	588.2
60°	361.7	418.6	494.2	544.5	563.1
62.5°	329.9	389.5	465.0	519.3	536.6
65°	294.1	359.0	437.2	491.5	508.7
67.5°	262.3	329.9	409.4	463.7	482.2
70°	227.9	296.8	378.9	435.9	451.8
72.5°	196.1	267.6	351.1	406.7	426.6
75°	163.0	237.1	321.9	378.9	396.1
77.5°	131.2	208.0	294.1	351.1	369.6
80°	99.4	180.2	266.3	321.9	340.5
82.5°	72.9	152.4	239.8	295.4	312.7
85°	47.7	129.8	214.6	270.3	288.8
87.5°	29.1	108.6	193.4	247.7	265.0
90°	13.9	98.5	188.9	245.4	262.7
92.5°	29.4	96.8	179.8	232.8	249.4
95°	56.2	95.3	179.8	233.6	248.8
97.5°	91.4	90.8	178.9	230.0	246.6
100°	133.5	86.4	172.5	227.1	243.1
102.5°	178.4	220.8	164.6	220.0	236.7
105°	219.9	279.3	156.7	210.8	228.2
107.5°	269.7	319.0	148.9	201.6	219.0
110°	316.1	357.3	219.5	191.7	209.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	361.0	394.8	443.8	183.8	200.5
115°	408.7	435.2	512.3	227.2	191.3
117.5°	448.8	473.4	540.9	480.4	309.8
120°	495.1	510.9	576.5	622.0	541.8
122.5°	534.4	546.9	609.9	649.9	662.5
125°	572.9	582.1	637.8	678.5	692.5
127.5°	609.4	617.9	664.3	704.4	717.0
130°	643.8	653.7	689.2	728.8	738.7
132.5°	678.9	686.7	714.3	751.1	761.0
135°	707.0	718.3	737.9	772.7	781.9
137.5°	737.9	746.3	759.9	792.2	799.4
140°	768.1	772.4	782.7	810.2	814.7
142.5°	793.3	796.9	806.1	827.6	830.7
145°	818.7	818.0	829.9	842.7	845.9
147.5°	841.8	839.7	851.7	856.5	857.7
150°	864.3	859.4	870.6	874.8	871.3
152.5°	883.2	877.6	888.1	892.4	887.4
155°	901.5	895.2	903.6	907.8	902.2
157.5°	916.2	910.6	916.9	921.8	916.2
160°	928.8	924.6	928.8	933.0	928.1
162.5°	940.1	935.8	939.4	944.3	938.0
165°	949.9	945.7	947.8	952.7	947.8
167.5°	957.6	953.4	955.5	960.4	954.1
170°	963.9	959.7	961.1	966.0	959.7
172.5°	968.1	963.9	965.3	970.2	963.9
175°	971.6	966.7	968.1	973.0	966.0
177.5°	973.0	968.1	968.8	973.7	967.4
180°	969.5	969.5	969.5	969.5	969.5

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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	14.40	15.30	15.35	16.28	17.56	17.47	18.37	18.43	19.35	20.63
	3H	15.86	16.68	16.83	17.66	18.97	20.07	20.88	21.03	21.87	23.17
	4H	16.34	17.11	17.32	18.10	19.41	21.32	22.09	22.30	23.09	24.40
	6H	16.62	17.34	17.61	18.34	19.66	22.62	23.34	23.61	24.33	25.66
	8H	16.68	17.37	17.68	18.38	19.70	23.28	23.96	24.27	24.98	26.30
	12H	16.70	17.36	17.70	18.36	19.71	24.01	24.66	25.01	25.67	27.01
4H	2H	15.45	16.23	16.44	17.22	18.53	17.81	18.58	18.79	19.57	20.88
	3H	17.16	17.82	18.16	18.84	20.16	20.60	21.26	21.59	22.28	23.60
	4H	17.79	18.39	18.79	19.40	20.75	22.02	22.62	23.02	23.64	24.98
	6H	18.20	18.73	19.22	19.77	21.11	23.49	24.02	24.50	25.05	26.40
	8H	18.31	18.81	19.33	19.84	21.20	24.25	24.74	25.26	25.77	27.13
	12H	18.36	18.81	19.39	19.85	21.22	25.08	25.53	26.11	26.57	27.94
8H	4H	18.58	19.07	19.59	20.10	21.46	22.17	22.66	23.18	23.69	25.05
	6H	19.21	19.63	20.25	20.70	22.06	23.80	24.21	24.84	25.28	26.64
	8H	19.44	19.81	20.48	20.86	22.24	24.69	25.06	25.73	26.11	27.49
	12H	19.57	19.90	20.62	20.95	22.37	25.68	26.01	26.73	27.06	28.48
12H	4H	18.78	19.23	19.81	20.27	21.64	22.14	22.59	23.18	23.64	25.00
	6H	19.55	19.92	20.59	20.97	22.35	23.82	24.19	24.87	25.25	26.62
	8H	19.86	20.18	20.91	21.23	22.65	24.75	25.08	25.80	26.13	27.55