

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: P1025441

Luminaire Tested: S124DIP-B350D810UB27-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025441
REPORT IS A COMBINATION OF REPORTS P995966 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

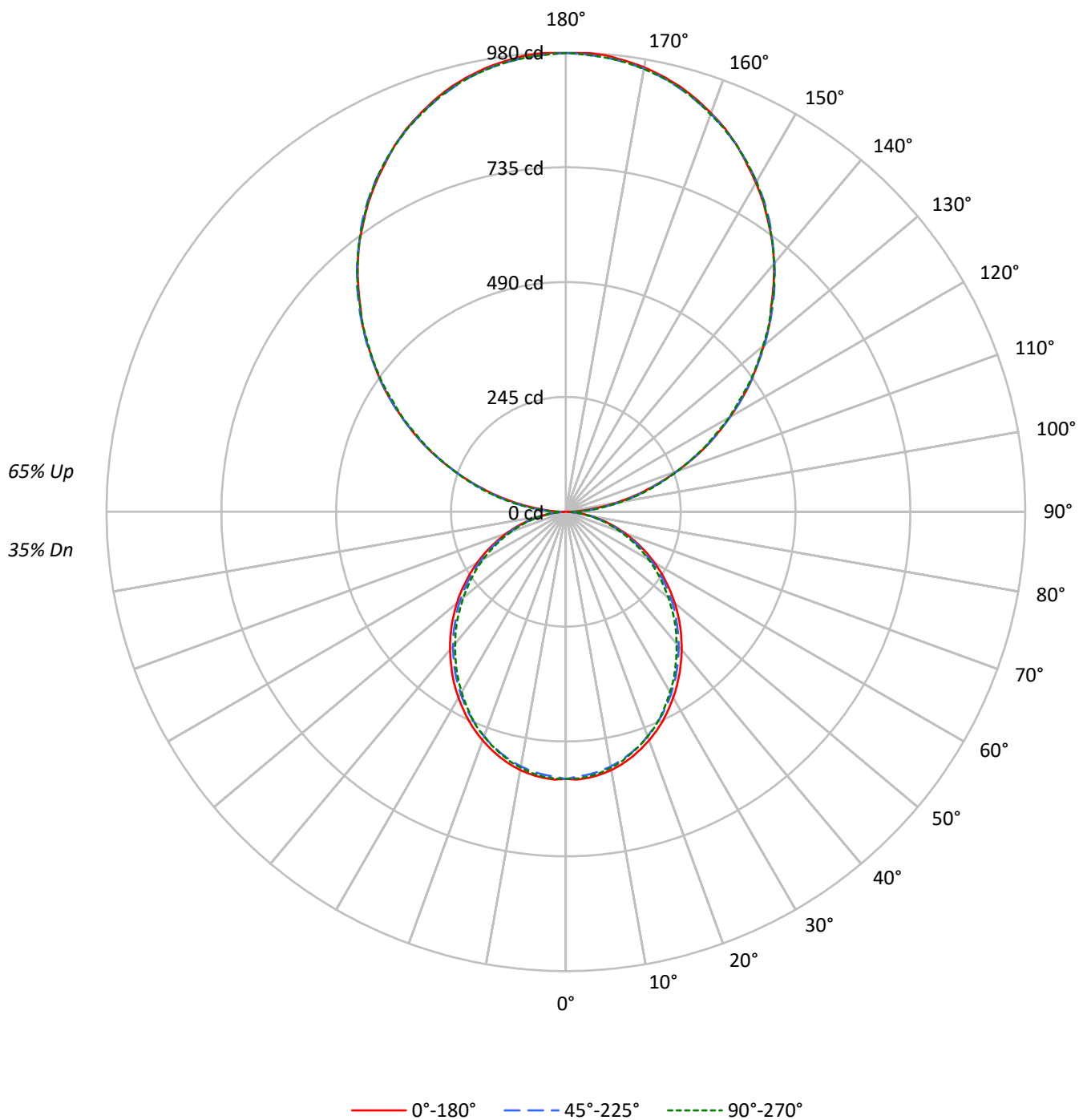
Lumens per Lamp: N/A
Luminaire Lumens: 4181.0 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	36	36
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4648	4648	4648
5°	4652	4514	4520
10°	4612	4389	4359
15°	4546	4240	4176
20°	4461	4079	3988
25°	4367	3909	3784
30°	4252	3724	3561
35°	4134	3536	3346
40°	4010	3333	3116
45°	3879	3129	2902
50°	3736	2932	2665
55°	3580	2702	2429
60°	3420	2450	2184
65°	3238	2189	1907
70°	3025	1876	1611
75°	2712	1511	1289
80°	2311	1093	907
85°	1797	607	488

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3879 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	1.3
10°-20°	151.4	3.6
20°-30°	222.8	5.3
30°-40°	258.9	6.2
40°-50°	258.9	6.2
50°-60°	226.5	5.4
60°-70°	168.1	4.0
70°-80°	95.4	2.3
80°-90°	29.4	0.7
90°-100°	63.8	1.5
100°-110°	191.1	4.6
110°-120°	324.7	7.8
120°-130°	428.2	10.2
130°-140°	480.9	11.5
140°-150°	472.7	11.3
150°-160°	397.5	9.5
160°-170°	264.5	6.3
170°-180°	92.6	2.2
0°-30°	427.8	10.2
0°-40°	686.8	16.4
0°-60°	1172.2	28.0
0°-90°	1465.1	35.0
90°-120°	579.5	13.9
90°-150°	1961.2	46.9
90°-180°	2716.0	65.0
0°-180°	4181.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	570	570	570	570	570	
5°	570	568	563	568	567	54
15°	542	540	534	536	535	153
25°	491	488	481	482	480	226
35°	422	419	413	410	407	264
45°	345	342	334	329	328	266
55°	261	259	253	248	245	234
65°	177	174	170	165	163	175
75°	94	92	90	88	87	100
85°	25	25	24	24	23	27
90°	2	11	17	21	23	5
95°	45	52	58	60	60	49
105°	176	177	180	182	185	187
115°	330	330	328	328	327	326
125°	481	481	480	478	477	429
135°	620	624	624	623	621	480
145°	753	756	757	756	754	471
155°	863	863	862	865	862	397
165°	940	937	936	940	937	265
175°	977	974	973	978	973	93
180°	979	979	979	979	979	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	570.0	570.0	570.0	570.0	570.0
2.5°	571.8	570.5	565.4	570.0	569.5
5°	569.5	567.7	562.7	567.7	566.8
7.5°	565.4	563.6	558.1	562.2	561.8
10°	559.5	557.7	551.7	555.4	554.5
12.5°	551.7	549.9	543.5	547.6	546.2
15°	542.1	540.3	533.5	536.2	534.8
17.5°	531.2	528.9	522.5	524.3	523.4
20°	518.8	516.6	509.7	511.1	510.2
22.5°	505.6	502.4	495.5	498.3	496.5
25°	491.0	487.8	481.4	481.8	480.0
27.5°	474.5	471.3	465.4	464.5	462.2
30°	458.1	454.4	448.5	446.7	444.4
32.5°	440.7	437.5	431.1	428.9	426.6
35°	422.5	419.3	412.9	409.7	407.4
37.5°	403.3	400.5	393.7	390.5	387.3
40°	384.6	380.9	374.1	369.5	367.2
42.5°	364.5	362.6	354.9	349.4	348.0
45°	344.8	341.6	334.3	329.3	327.9
47.5°	324.3	322.0	315.1	309.7	306.0
50°	303.3	301.4	295.0	288.7	285.9
52.5°	282.7	280.4	273.6	268.1	264.4
55°	260.8	259.4	253.0	247.5	244.8
57.5°	240.2	238.9	232.5	227.0	224.3
60°	218.8	216.5	210.6	206.4	204.2
62.5°	197.8	195.9	189.5	185.9	183.6
65°	176.8	174.5	169.9	165.3	163.1
67.5°	155.3	153.5	148.9	144.3	143.9
70°	135.6	132.5	128.8	125.1	123.8
72.5°	114.6	111.4	108.7	106.0	104.6
75°	94.1	91.8	89.5	87.7	87.2
77.5°	74.0	73.1	70.8	70.3	69.0
80°	56.2	54.8	53.9	53.0	52.5
82.5°	38.8	38.4	38.4	37.9	37.5
85°	24.7	24.7	23.7	23.7	23.3
87.5°	11.9	11.4	11.0	11.0	11.0
90°	2.3	10.6	16.7	21.2	22.7
92.5°	19.7	29.5	33.3	35.6	36.3
95°	45.4	52.2	57.5	59.8	59.8
97.5°	72.7	78.7	84.8	87.8	87.8
100°	106.0	109.0	115.8	117.3	117.3
102.5°	140.8	141.6	147.6	149.9	150.6
105°	176.4	177.1	180.2	182.4	184.7
107.5°	213.5	214.2	215.0	218.0	217.3
110°	251.3	252.8	252.1	250.6	252.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	290.7	290.7	289.2	289.2	289.2
115°	330.1	330.1	328.5	327.8	327.0
117.5°	367.2	367.2	366.4	364.1	361.9
120°	404.3	407.3	405.0	401.2	402.7
122.5°	442.9	443.6	442.9	440.6	436.8
125°	480.7	480.7	480.0	478.4	476.9
127.5°	514.8	517.0	515.5	514.0	513.3
130°	551.1	553.4	553.4	551.9	548.8
132.5°	588.2	589.7	589.0	587.5	586.7
135°	620.0	624.5	624.5	623.0	620.8
137.5°	655.6	657.9	659.4	657.1	657.9
140°	691.2	692.7	692.7	691.9	691.2
142.5°	723.7	725.2	724.5	724.5	724.5
145°	753.2	756.3	757.0	756.3	754.0
147.5°	783.5	787.3	786.6	785.8	785.0
150°	810.8	813.8	813.8	813.8	813.0
152.5°	836.5	838.0	838.8	841.1	838.8
155°	863.0	863.0	862.3	865.3	862.3
157.5°	885.7	884.2	884.2	886.5	884.2
160°	905.4	904.6	903.9	906.2	902.4
162.5°	923.6	921.3	920.5	925.1	921.3
165°	939.5	937.2	935.7	940.2	937.2
167.5°	952.3	949.3	949.3	953.9	949.3
170°	962.9	959.2	959.9	964.5	959.2
172.5°	970.5	967.5	967.5	972.8	967.5
175°	977.3	973.5	972.8	978.1	972.8
177.5°	980.3	976.6	976.6	981.9	975.8
180°	978.8	978.8	978.8	978.8	978.8

(END OF REPORT)