

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: P1025703

Luminaire Tested: S124DIP-B575D810UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025703
REPORT IS A COMBINATION OF REPORTS P996318 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B575D810UB50-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

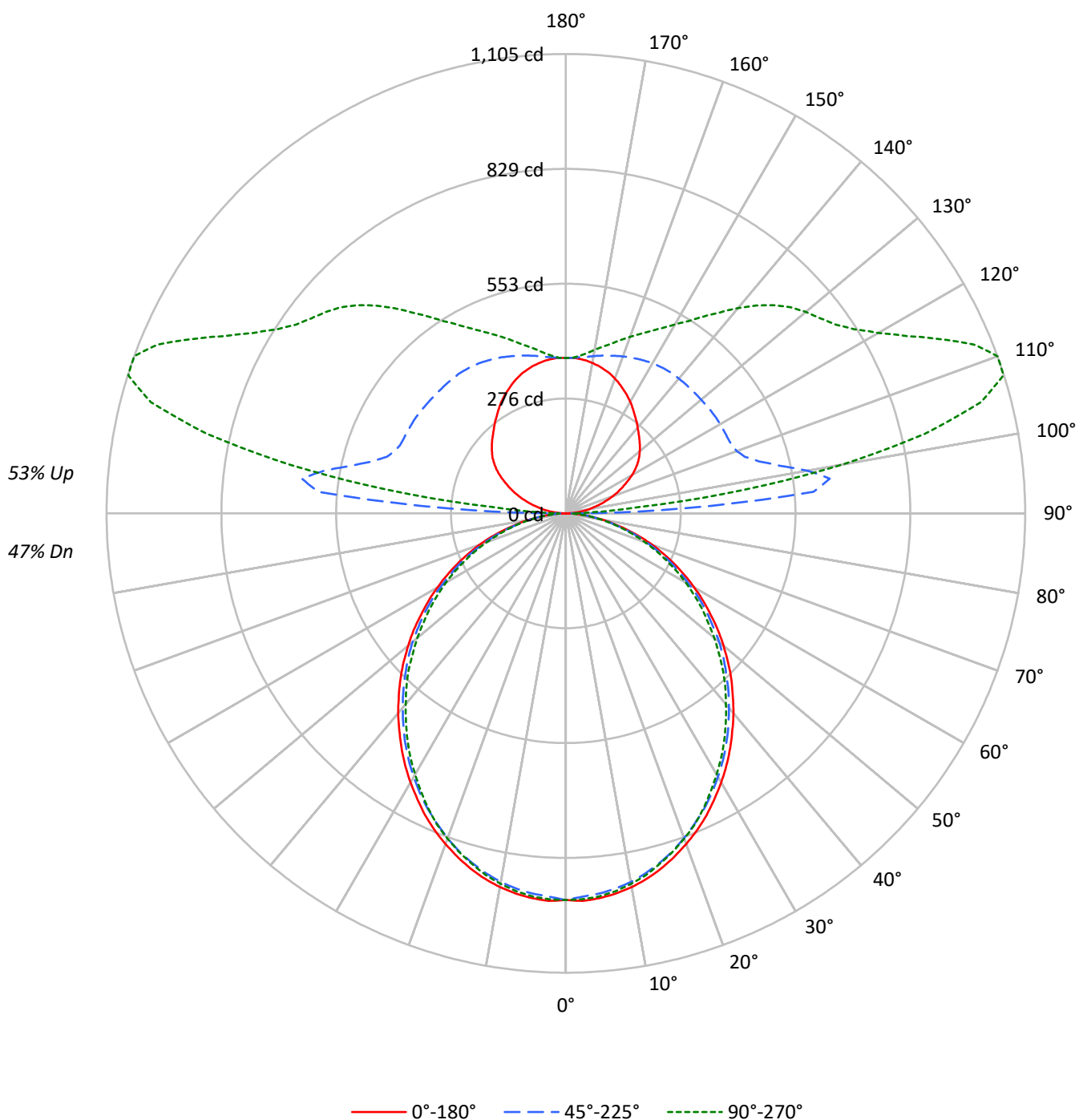
Lumens per Lamp: N/A
Luminaire Lumens: 5116.4 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 45.1
Input Voltage (V):
Input Current (A_{in}): 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	50	30	10
RCR																				
0	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53			47
1	97	93	89	85	89	85	82	79	71	69	67	59	57	55	47	46	45			39
2	88	81	75	70	81	75	69	65	63	59	55	51	49	46	41	39	38			33
3	81	71	64	58	74	66	59	54	55	50	46	45	42	39	37	34	32			28
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28			24
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24			21
6	62	50	42	36	57	47	39	34	39	34	30	33	29	25	27	24	21			18
7	58	45	37	32	53	42	35	30	36	30	26	30	26	22	24	21	19			16
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	22	19	17			14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15			13
10	46	34	27	22	43	32	26	21	27	22	19	23	19	16	19	16	14			12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7584	7584	7584
5°	7589	7366	7375
10°	7526	7161	7111
15°	7417	6918	6813
20°	7280	6655	6506
25°	7125	6377	6174
30°	6937	6077	5811
35°	6744	5769	5459
40°	6541	5438	5085
45°	6330	5106	4735
50°	6095	4785	4348
55°	5841	4408	3963
60°	5579	3997	3563
65°	5282	3572	3111
70°	4937	3059	2627
75°	4424	2467	2104
80°	3771	1783	1480
85°	2925	992	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6330 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	1.7
10°-20°	247.0	4.8
20°-30°	363.4	7.1
30°-40°	422.5	8.3
40°-50°	422.5	8.3
50°-60°	369.5	7.2
60°-70°	274.3	5.4
70°-80°	155.6	3.0
80°-90°	46.0	0.9
90°-100°	277.7	5.4
100°-110°	564.7	11.0
110°-120°	503.4	9.8
120°-130°	422.8	8.3
130°-140°	352.9	6.9
140°-150°	269.5	5.3
150°-160°	189.4	3.7
160°-170°	111.4	2.2
170°-180°	36.2	0.7
0°-30°	698.1	13.6
0°-40°	1120.5	21.9
0°-60°	1912.5	37.4
0°-90°	2388.4	46.7
90°-120°	1345.8	26.3
90°-150°	2390.9	46.7
90°-180°	2728.0	53.3
0°-180°	5116.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	929	926	918	926	925	88
15°	884	882	870	875	873	249
25°	801	796	785	786	783	369
35°	689	684	674	668	665	431
45°	563	557	546	537	535	434
55°	426	423	413	404	399	381
65°	288	285	277	270	266	285
75°	154	150	146	143	142	163
85°	40	40	39	39	38	43
90°	1	6	13	15	15	4
95°	24	76	598	296	179	27
105°	86	124	482	1037	1033	92
115°	151	190	430	825	992	150
125°	211	250	427	702	792	188
135°	250	298	424	624	708	194
145°	289	330	422	526	578	181
155°	328	354	410	464	484	151
165°	358	369	393	416	422	101
175°	373	374	377	382	380	35
180°	374	374	374	374	374	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.0	930.0	930.0	930.0	930.0
2.5°	933.0	930.7	922.5	930.0	929.2
5°	929.2	926.3	918.1	926.3	924.8
7.5°	922.5	919.6	910.6	917.3	916.6
10°	912.9	909.9	900.2	906.1	904.7
12.5°	900.2	897.2	886.8	893.5	891.2
15°	884.5	881.6	870.4	874.8	872.6
17.5°	866.6	862.9	852.5	855.5	854.0
20°	846.5	842.8	831.6	833.9	832.4
22.5°	824.9	819.7	808.5	813.0	810.0
25°	801.1	795.9	785.4	786.2	783.2
27.5°	774.2	769.0	759.3	757.9	754.1
30°	747.4	741.5	731.8	728.8	725.1
32.5°	719.1	713.9	703.5	699.7	696.0
35°	689.3	684.1	673.6	668.4	664.7
37.5°	658.0	653.5	642.3	637.1	631.9
40°	627.4	621.5	610.3	602.9	599.1
42.5°	594.7	591.7	579.0	570.1	567.8
45°	562.6	557.4	545.5	537.3	535.0
47.5°	529.1	525.4	514.2	505.2	499.3
50°	494.8	491.8	481.4	471.0	466.5
52.5°	461.3	457.5	446.4	437.4	431.5
55°	425.5	423.3	412.8	403.9	399.4
57.5°	392.0	389.7	379.3	370.4	365.9
60°	356.9	353.2	343.5	336.8	333.1
62.5°	322.7	319.7	309.3	303.3	299.6
65°	288.4	284.7	277.2	269.8	266.0
67.5°	253.4	250.4	242.9	235.5	234.7
70°	221.3	216.1	210.1	204.2	201.9
72.5°	187.0	181.8	177.4	172.9	170.6
75°	153.5	149.8	146.1	143.1	142.3
77.5°	120.7	119.2	115.5	114.8	112.5
80°	91.7	89.4	87.9	86.4	85.7
82.5°	63.3	62.6	62.6	61.9	61.1
85°	40.2	40.2	38.7	38.7	38.0
87.5°	19.4	18.6	17.9	17.9	17.9
90°	0.7	5.9	13.2	14.7	15.4
92.5°	10.3	56.6	287.9	95.1	66.8
95°	24.2	76.4	598.5	296.3	179.2
97.5°	40.4	84.4	640.4	605.2	430.4
100°	55.8	95.4	590.5	837.2	673.4
102.5°	70.5	108.7	528.0	982.6	884.9
105°	85.9	124.4	481.8	1037.4	1033.3
107.5°	102.8	140.6	451.7	1020.8	1103.8
110°	119.7	156.8	437.7	962.0	1105.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.9	173.0	431.1	890.1	1061.9
115°	151.3	189.9	429.6	825.4	992.2
117.5°	167.4	205.6	428.9	774.8	923.9
120°	183.6	221.0	428.9	740.7	868.1
122.5°	198.3	236.1	428.2	718.2	824.0
125°	210.8	250.4	427.4	702.4	791.7
127.5°	222.5	263.6	425.9	687.4	771.1
130°	232.1	276.5	425.2	669.4	753.5
132.5°	241.6	287.5	424.5	648.1	733.7
135°	250.4	298.2	423.7	623.5	708.0
137.5°	259.2	307.4	423.7	597.1	677.8
140°	268.8	315.8	423.0	571.3	644.8
142.5°	279.1	323.5	423.0	547.4	609.5
145°	288.6	330.5	421.5	525.8	578.0
147.5°	299.6	337.0	419.3	507.8	548.6
150°	309.9	343.4	417.1	491.3	524.4
152.5°	319.5	349.2	413.5	477.4	502.3
155°	328.3	354.4	409.8	464.1	484.0
157.5°	337.1	359.1	406.1	451.6	467.1
160°	345.2	363.2	401.7	439.2	451.7
162.5°	352.5	366.4	397.3	427.0	437.0
165°	357.7	368.7	392.9	416.0	422.3
167.5°	363.5	370.5	388.5	406.5	410.5
170°	367.2	372.0	384.1	396.9	399.5
172.5°	370.9	373.0	379.7	388.5	388.5
175°	373.1	373.8	376.7	381.9	380.4
177.5°	374.5	373.8	374.5	377.1	374.5
180°	373.8	373.8	373.8	373.8	373.8

(END OF REPORT)