

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: P1012551

Luminaire Tested: S123RDIP-B340D805UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012551
REPORT IS A COMBINATION OF REPORTS P993318 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B340D805UB50-4F0-XX-W2A-F4
Description: Define 3 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

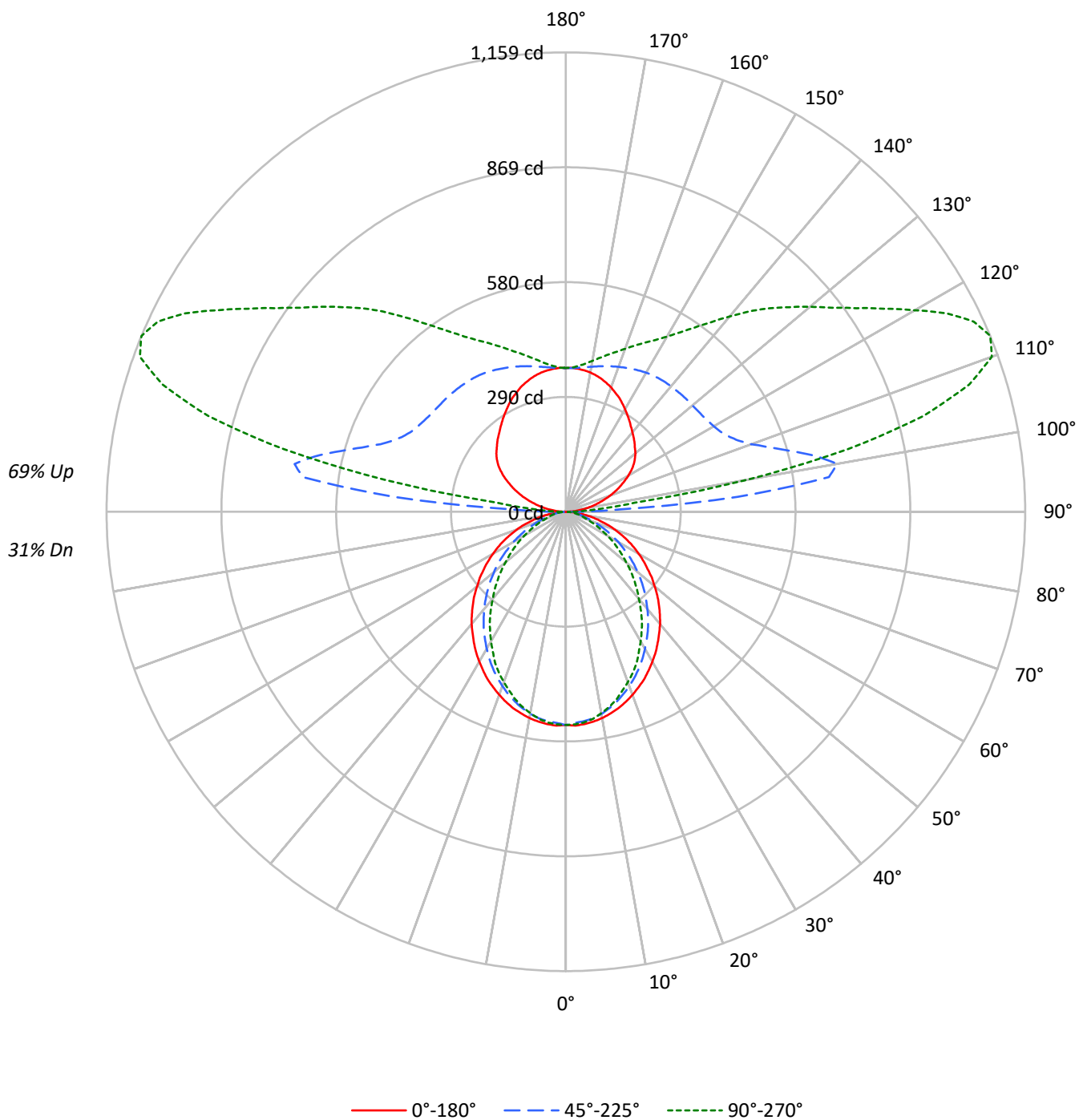
Lumens per Lamp: N/A
Luminaire Lumens: 3951.3 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
RCR																	
0	103	103	103	103	92	92	92	92	73	73	73		55	55	55		38
1	94	90	86	83	84	81	78	75	64	62	60		48	47	46		34
2	85	78	73	68	77	71	66	62	56	53	50		43	41	39		30
3	78	69	62	56	70	62	56	52	50	45	42		38	35	33		27
4	71	61	54	48	64	55	49	44	44	40	36		34	31	28		24
5	65	54	47	41	59	49	43	38	39	35	31		30	27	24		22
6	60	49	41	35	54	44	37	33	36	31	27		27	24	21		20
7	56	44	36	31	50	40	33	29	32	27	24		25	22	19		18
8	52	40	32	27	46	36	30	25	29	24	21		23	19	17		17
9	48	36	29	24	43	33	27	22	27	22	19		21	18	15		15
10	45	33	26	22	40	30	24	20	25	20	17		19	16	14		14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5789	5789	5789
5°	5798	5584	5569
10°	5752	5374	5268
15°	5678	5114	4939
20°	5580	4832	4571
25°	5479	4539	4222
30°	5349	4227	3810
35°	5216	3921	3434
40°	5091	3588	3019
45°	4929	3262	2647
50°	4752	2915	2260
55°	4568	2543	1906
60°	4393	2162	1548
65°	4165	1770	1208
70°	3878	1338	864
75°	3469	906	684
80°	2959	630	480
85°	2219	340	250

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4929 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.6	1.3
10°-20°	140.6	3.6
20°-30°	202.5	5.1
30°-40°	228.0	5.8
40°-50°	218.1	5.5
50°-60°	178.6	4.5
60°-70°	120.4	3.0
70°-80°	60.4	1.5
80°-90°	17.8	0.5
90°-100°	206.1	5.2
100°-110°	576.0	14.6
110°-120°	561.7	14.2
120°-130°	447.2	11.3
130°-140°	353.1	8.9
140°-150°	263.4	6.7
150°-160°	183.8	4.7
160°-170°	107.9	2.7
170°-180°	35.1	0.9
0°-30°	393.7	10.0
0°-40°	621.7	15.7
0°-60°	1018.4	25.8
0°-90°	1217.0	30.8
90°-120°	1343.8	34.0
90°-150°	2407.5	60.9
90°-180°	2734.0	69.2
0°-180°	3951.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	538	538	538	538	538	
5°	538	536	530	534	533	51
15°	513	508	496	494	491	145
25°	467	456	436	427	422	215
35°	404	388	361	342	334	253
45°	332	312	279	254	243	256
55°	252	231	194	168	160	226
65°	172	148	114	93	88	171
75°	91	70	46	42	41	97
85°	23	14	12	11	11	25
90°	2	9	18	21	21	3
95°	25	81	435	127	85	26
105°	85	126	590	1032	934	90
115°	150	188	452	990	1136	149
125°	209	247	421	764	896	186
135°	245	293	416	629	726	189
145°	280	320	410	516	568	175
155°	318	343	397	452	471	146
165°	347	357	380	403	410	98
175°	362	362	365	370	369	34
180°	363	363	363	363	363	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	537.8	537.8	537.8	537.8	537.8
2.5°	540.0	538.2	533.0	537.8	536.9
5°	537.8	535.6	530.4	534.3	533.4
7.5°	533.9	531.7	525.2	527.8	526.5
10°	528.6	525.6	517.7	518.2	516.0
12.5°	521.2	517.7	507.7	507.3	504.7
15°	512.9	508.1	495.9	493.8	490.7
17.5°	502.9	497.7	482.4	478.1	473.7
20°	491.6	484.6	468.0	462.3	457.1
22.5°	478.9	470.6	452.8	445.3	440.5
25°	466.7	455.8	435.7	426.6	421.8
27.5°	451.9	440.1	418.3	406.1	398.7
30°	436.6	423.5	399.1	384.3	377.3
32.5°	421.3	406.1	379.9	363.3	355.9
35°	403.9	388.2	361.2	342.4	334.5
37.5°	386.5	369.4	341.1	320.2	310.6
40°	369.9	350.7	319.7	297.0	287.0
42.5°	351.1	331.9	299.7	274.4	265.6
45°	331.9	312.3	278.7	253.9	243.4
47.5°	313.2	291.4	258.2	231.2	222.0
50°	292.2	271.7	236.4	209.4	199.3
52.5°	273.5	250.8	215.9	187.6	178.8
55°	252.1	230.7	193.7	168.4	159.6
57.5°	232.9	209.8	172.3	148.3	140.9
60°	212.9	188.9	152.7	129.1	121.7
62.5°	192.8	168.8	132.6	110.8	102.9
65°	172.3	148.3	114.3	92.9	88.1
67.5°	151.8	127.4	94.2	78.1	72.8
70°	131.7	108.2	77.6	62.4	57.6
72.5°	111.7	88.5	61.5	49.7	48.4
75°	91.2	70.2	46.2	41.9	41.0
77.5°	72.4	53.2	36.2	33.6	32.7
80°	54.5	36.6	27.5	26.2	25.3
82.5°	37.5	22.7	19.6	18.3	18.3
85°	23.1	13.5	12.2	11.3	11.3
87.5°	10.5	5.7	5.7	5.2	4.8
90°	1.5	8.8	18.4	20.6	21.3
92.5°	11.0	44.0	136.5	46.6	38.9
95°	25.0	81.1	435.3	127.0	85.2
97.5°	39.6	92.9	669.5	319.4	174.7
100°	54.3	102.4	695.2	668.0	460.3
102.5°	69.7	113.4	647.5	894.6	729.0
105°	85.2	125.9	590.2	1032.2	933.8
107.5°	101.3	140.6	539.6	1092.8	1067.4
110°	118.9	155.6	497.7	1094.6	1143.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.1	171.4	469.8	1053.1	1159.2
115°	150.5	187.6	451.5	990.0	1135.7
117.5°	165.9	203.0	439.0	922.4	1084.3
120°	182.1	218.4	430.9	858.6	1016.8
122.5°	196.0	233.1	425.8	808.3	953.6
125°	209.2	247.0	421.4	763.5	895.6
127.5°	219.5	260.2	419.2	726.8	845.7
130°	229.1	272.0	417.0	693.0	804.6
132.5°	236.4	282.6	416.3	661.4	764.2
135°	245.2	292.6	415.5	628.8	726.1
137.5°	253.3	300.6	414.1	598.0	685.7
140°	261.4	308.0	413.3	567.8	643.1
142.5°	270.2	314.6	411.9	540.3	603.5
145°	279.7	320.4	410.4	515.8	567.5
147.5°	289.2	326.6	408.2	496.6	536.7
150°	298.8	331.8	405.2	479.8	510.2
152.5°	308.3	337.4	401.6	465.1	488.2
155°	317.9	342.8	397.2	451.5	470.6
157.5°	325.2	347.6	393.5	438.3	453.7
160°	334.0	351.6	389.1	426.2	437.5
162.5°	340.6	354.6	384.7	414.8	422.9
165°	347.2	357.2	380.3	403.4	410.4
167.5°	352.4	359.4	375.9	393.5	397.9
170°	356.8	360.4	371.5	384.7	386.9
172.5°	359.7	361.5	367.8	377.0	376.6
175°	361.9	362.3	364.9	370.0	369.3
177.5°	363.4	362.7	362.7	365.6	364.1
180°	362.7	362.7	362.7	362.7	362.7

(END OF REPORT)