

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: P1012398

Luminaire Tested: S123RDIP-B1165D805UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012398
REPORT IS A COMBINATION OF REPORTS P993111 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIP-B1165D805UB40-4F0-XX-W2A-F1
Description: Define 3 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

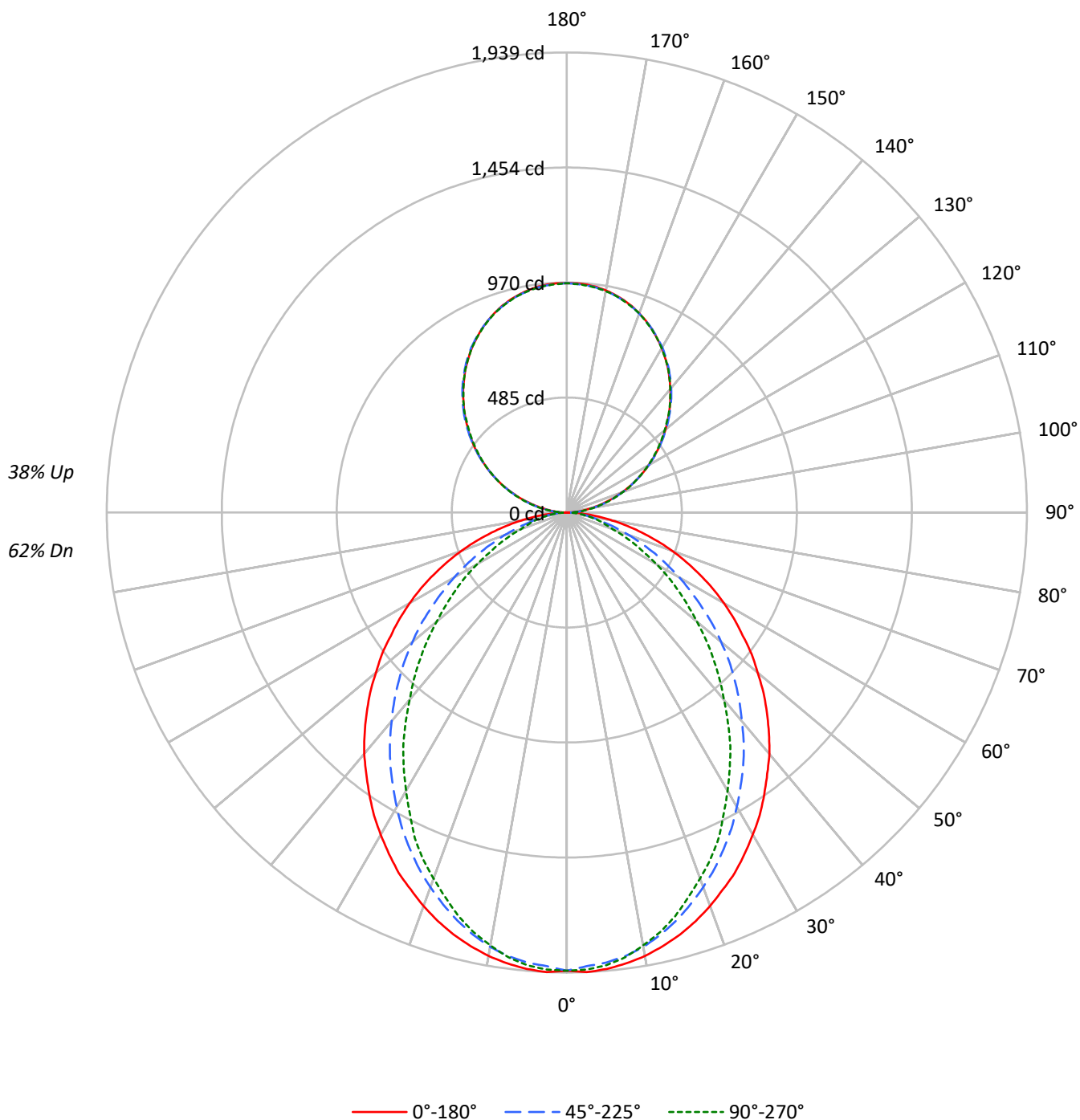
Lumens per Lamp: N/A
Luminaire Lumens: 7043.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 82.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	101	97	93	89	94	91	87	84	80	77	75	69	68	66	60	59	58
2	92	85	79	74	86	80	74	70	70	66	63	61	58	56	53	51	49
3	84	75	68	62	79	71	64	59	62	57	53	55	51	48	48	45	42
4	77	67	59	53	72	63	56	50	56	50	46	49	45	41	43	39	37
5	71	60	52	46	67	56	49	44	50	44	40	44	40	36	39	35	32
6	66	54	46	40	62	51	43	38	45	39	35	40	35	32	35	31	29
7	61	49	41	35	57	46	39	34	41	35	31	37	32	28	32	28	26
8	57	44	37	31	53	42	35	30	38	32	28	34	29	25	30	26	23
9	53	41	33	28	50	39	32	27	35	29	25	31	26	23	28	24	21
10	50	37	30	25	46	36	29	24	32	26	23	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20787	20787	20787
5°	20821	20052	19998
10°	20657	19298	18918
15°	20390	18367	17735
20°	20038	17353	16413
25°	19675	16299	15161
30°	19210	15180	13680
35°	18731	14079	12332
40°	18279	12884	10842
45°	17701	11715	9503
50°	17064	10467	8117
55°	16403	9131	6847
60°	15771	7762	5557
65°	14956	6356	4338
70°	13929	4806	3101
75°	12454	3254	2456
80°	10630	2262	1722
85°	7973	1222	902

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17701 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.5	2.6
10°-20°	505.0	7.2
20°-30°	727.2	10.3
30°-40°	818.9	11.6
40°-50°	783.3	11.1
50°-60°	641.2	9.1
60°-70°	432.3	6.1
70°-80°	216.8	3.1
80°-90°	58.7	0.8
90°-100°	62.2	0.9
100°-110°	188.3	2.7
110°-120°	320.6	4.6
120°-130°	421.7	6.0
130°-140°	474.0	6.7
140°-150°	466.0	6.6
150°-160°	392.4	5.6
160°-170°	261.2	3.7
170°-180°	91.5	1.3
0°-30°	1413.8	20.1
0°-40°	2232.6	31.7
0°-60°	3657.2	51.9
0°-90°	4365.1	62.0
90°-120°	571.1	8.1
90°-150°	1932.9	27.4
90°-180°	2678.0	38.0
0°-180°	7043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1931	1931	1931	1931	1931	
5°	1931	1923	1905	1919	1916	183
15°	1842	1825	1781	1773	1762	519
25°	1676	1637	1565	1532	1515	771
35°	1450	1394	1297	1230	1201	908
45°	1192	1122	1001	912	874	920
55°	905	829	695	605	573	812
65°	619	532	410	334	316	612
75°	327	252	166	150	147	349
85°	83	49	44	41	41	91
90°	1	8	18	21	23	8
95°	45	50	56	59	59	49
105°	171	172	179	179	181	183
115°	323	325	323	324	323	319
125°	472	474	473	470	467	421
135°	613	617	616	613	612	472
145°	743	745	747	746	743	464
155°	851	851	852	855	850	392
165°	927	925	925	929	924	261
175°	964	961	961	966	960	92
180°	966	966	966	966	966	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.2	1931.2	1931.2	1931.2	1931.2
2.5°	1939.1	1932.8	1914.0	1931.2	1928.1
5°	1931.2	1923.4	1904.6	1918.7	1915.6
7.5°	1917.1	1909.3	1885.8	1895.2	1890.5
10°	1898.3	1887.4	1859.2	1860.8	1852.9
12.5°	1871.7	1859.2	1823.2	1821.6	1812.2
15°	1842.0	1824.7	1780.9	1773.0	1762.1
17.5°	1805.9	1787.1	1732.3	1716.7	1701.0
20°	1765.2	1740.1	1680.6	1660.3	1641.5
22.5°	1719.8	1690.0	1625.8	1599.2	1582.0
25°	1675.9	1636.8	1564.7	1531.8	1514.6
27.5°	1622.7	1580.4	1502.1	1458.2	1431.6
30°	1567.9	1520.9	1433.2	1379.9	1354.8
32.5°	1513.0	1458.2	1364.2	1304.7	1278.1
35°	1450.4	1394.0	1296.9	1229.5	1201.3
37.5°	1387.7	1326.6	1224.8	1149.7	1115.2
40°	1328.2	1259.3	1148.1	1066.6	1030.6
42.5°	1260.9	1191.9	1076.0	985.2	953.9
45°	1191.9	1121.5	1000.9	911.6	874.0
47.5°	1124.6	1046.3	927.2	830.1	797.2
50°	1049.4	975.8	848.9	751.8	715.8
52.5°	982.1	900.6	775.3	673.5	642.2
55°	905.3	828.6	695.4	604.6	573.3
57.5°	836.4	753.4	618.7	532.5	505.9
60°	764.3	678.2	548.2	463.6	437.0
62.5°	692.3	606.2	476.2	397.8	369.6
65°	618.7	532.5	410.4	333.6	316.4
67.5°	545.1	457.4	338.3	280.4	261.6
70°	473.0	388.4	278.8	224.0	206.8
72.5°	401.0	318.0	220.8	178.6	173.9
75°	327.4	252.2	166.0	150.4	147.2
77.5°	260.0	191.1	130.0	120.6	117.5
80°	195.8	131.6	98.7	94.0	90.8
82.5°	134.7	81.4	70.5	65.8	65.8
85°	83.0	48.6	43.9	40.7	40.7
87.5°	37.6	20.4	20.4	18.8	17.2
90°	0.8	8.4	18.2	21.3	22.8
92.5°	22.8	27.3	31.9	34.2	32.6
95°	44.8	50.1	56.2	59.2	59.2
97.5°	73.6	77.4	82.0	85.8	85.0
100°	103.3	107.8	111.6	113.9	115.4
102.5°	137.4	139.7	145.0	147.3	146.5
105°	170.8	172.3	179.2	179.2	180.7
107.5°	210.3	211.1	214.1	216.4	215.6
110°	246.7	248.3	249.8	252.8	251.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.7	285.5	285.5	289.3	289.3
115°	322.7	324.9	323.4	324.2	323.4
117.5°	361.4	362.1	360.6	360.6	358.4
120°	397.1	401.6	397.8	397.1	395.6
122.5°	434.3	437.3	435.8	433.5	431.2
125°	472.2	474.5	473.0	470.0	466.9
127.5°	507.2	511.7	510.2	505.6	502.6
130°	542.1	548.2	545.9	542.8	537.5
132.5°	577.0	583.1	581.6	577.8	574.0
135°	612.7	617.2	616.5	613.4	611.9
137.5°	645.3	649.1	651.4	647.6	645.3
140°	679.5	683.3	684.1	683.3	678.0
142.5°	710.6	714.4	715.9	715.2	711.4
145°	743.3	744.8	747.1	746.3	743.3
147.5°	771.4	774.4	776.7	776.7	772.1
150°	801.0	802.5	804.0	804.0	799.5
152.5°	825.3	827.5	828.3	829.8	826.0
155°	851.1	851.1	851.8	854.9	849.6
157.5°	873.1	872.3	873.1	876.1	871.6
160°	893.6	892.1	892.1	895.9	892.8
162.5°	911.8	909.5	910.3	914.1	908.8
165°	927.0	924.7	924.7	929.3	924.0
167.5°	939.9	936.9	937.6	942.2	937.6
170°	950.5	947.5	947.5	952.8	947.5
172.5°	958.9	955.9	955.9	960.4	955.1
175°	964.2	961.2	961.2	965.7	960.4
177.5°	967.2	964.2	964.2	968.8	963.4
180°	966.5	966.5	966.5	966.5	966.5

(END OF REPORT)