

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: NEO-RAY

Report Number: P334909

Luminaire Tested: **S124IP-S1205U840-4F0-1E-UDD**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334909  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124IP-S1205U840-4F0-1E-UDD  
Description: DEFINE 4 INDIRECT LED LUMINAIRE, NO LENS  
PENDANT MOUNT, 1205 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

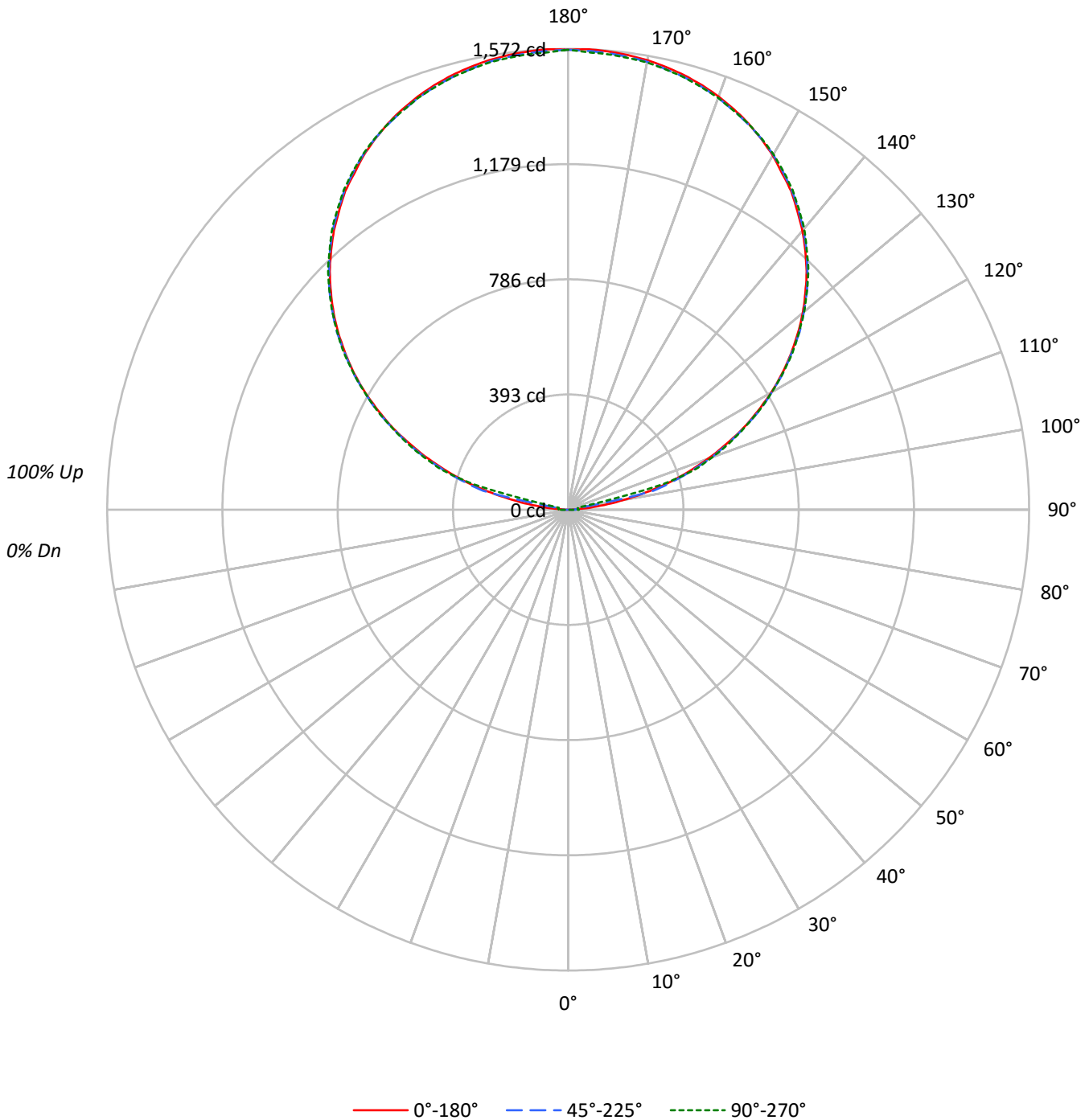
Lumens per Lamp: N/A  
Luminaire Lumens: 4857.8 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Indirect

Input Watts (W): 41.9  
Input Voltage (V): 120  
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: 25 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	3.2	0.1
90°-100°	52.1	1.1
100°-110°	343.0	7.1
110°-120°	654.9	13.5
120°-130°	831.4	17.1
130°-140°	889.4	18.3
140°-150°	831.7	17.1
150°-160°	670.7	13.8
160°-170°	432.5	8.9
170°-180°	149.1	3.1
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	3.2	0.1
90°-120°	1049.9	21.6
90°-150°	3602.4	74.2
90°-180°	4855.0	99.9
0°-180°	4857.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	4	16	26	33	35	3
95°	64	25	26	33	34	80
105°	353	360	366	377	334	370
115°	660	663	662	664	664	649
125°	927	932	929	933	934	828
135°	1150	1149	1154	1156	1158	886
145°	1326	1330	1330	1331	1333	829
155°	1454	1455	1452	1456	1453	670
165°	1534	1528	1528	1537	1527	433
175°	1569	1562	1563	1574	1560	149
180°	1569	1569	1569	1569	1569	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	3.5	16.4	25.8	32.9	35.2
92.5°	17.6	15.3	24.6	31.7	31.7
95°	64.5	24.6	25.8	32.9	34.0
97.5°	123.2	149.0	25.8	31.7	32.9
100°	192.4	213.6	51.6	31.7	32.9
102.5°	269.9	284.0	298.0	34.0	34.0
105°	353.2	360.2	366.1	376.7	334.4
107.5°	429.5	433.0	441.2	447.1	451.8
110°	506.9	510.4	517.5	519.8	523.3



TEST NUMBER: P334909

CATALOG NUMBER: S124IP-S1205U840-4F0-1E-UDD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	582.0	589.1	591.4	590.2	594.9
115°	659.5	663.0	661.8	664.2	664.2
117.5°	728.7	733.4	736.9	735.7	735.7
120°	799.1	803.8	802.6	805.0	802.6
122.5°	864.8	867.2	869.5	870.7	868.3
125°	927.0	931.7	929.3	932.9	934.0
127.5°	986.8	988.0	993.9	992.7	991.5
130°	1044.3	1045.5	1049.0	1050.2	1050.2
132.5°	1097.1	1099.5	1104.2	1105.4	1104.2
135°	1149.9	1148.8	1153.5	1155.8	1158.2
137.5°	1196.9	1196.9	1202.8	1205.1	1203.9
140°	1242.6	1245.0	1247.3	1250.9	1252.0
142.5°	1283.7	1288.4	1289.6	1291.9	1291.9
145°	1326.0	1329.5	1329.5	1330.7	1333.0
147.5°	1358.8	1365.9	1364.7	1365.9	1367.0
150°	1395.2	1399.9	1398.7	1398.7	1399.9
152.5°	1425.7	1429.2	1426.9	1429.2	1428.0
155°	1453.9	1455.0	1451.5	1456.2	1452.7
157.5°	1478.5	1478.5	1473.8	1479.7	1473.8
160°	1499.6	1496.1	1494.9	1502.0	1494.9
162.5°	1518.4	1513.7	1512.5	1519.6	1511.4
165°	1533.7	1527.8	1527.8	1537.2	1526.6
167.5°	1546.6	1540.7	1539.5	1550.1	1538.3
170°	1557.1	1550.1	1551.3	1560.6	1548.9
172.5°	1564.2	1557.1	1558.3	1567.7	1554.8
175°	1568.9	1561.8	1563.0	1573.6	1559.5
177.5°	1572.4	1564.2	1566.5	1575.9	1561.8
180°	1568.9	1568.9	1568.9	1568.9	1568.9

(END OF REPORT)