

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: P333998

Luminaire Tested: **S123DP-S1000D840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333998  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123DP-S1000D840-4F0-1E-UDD-F  
Description: DEFINE 3 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

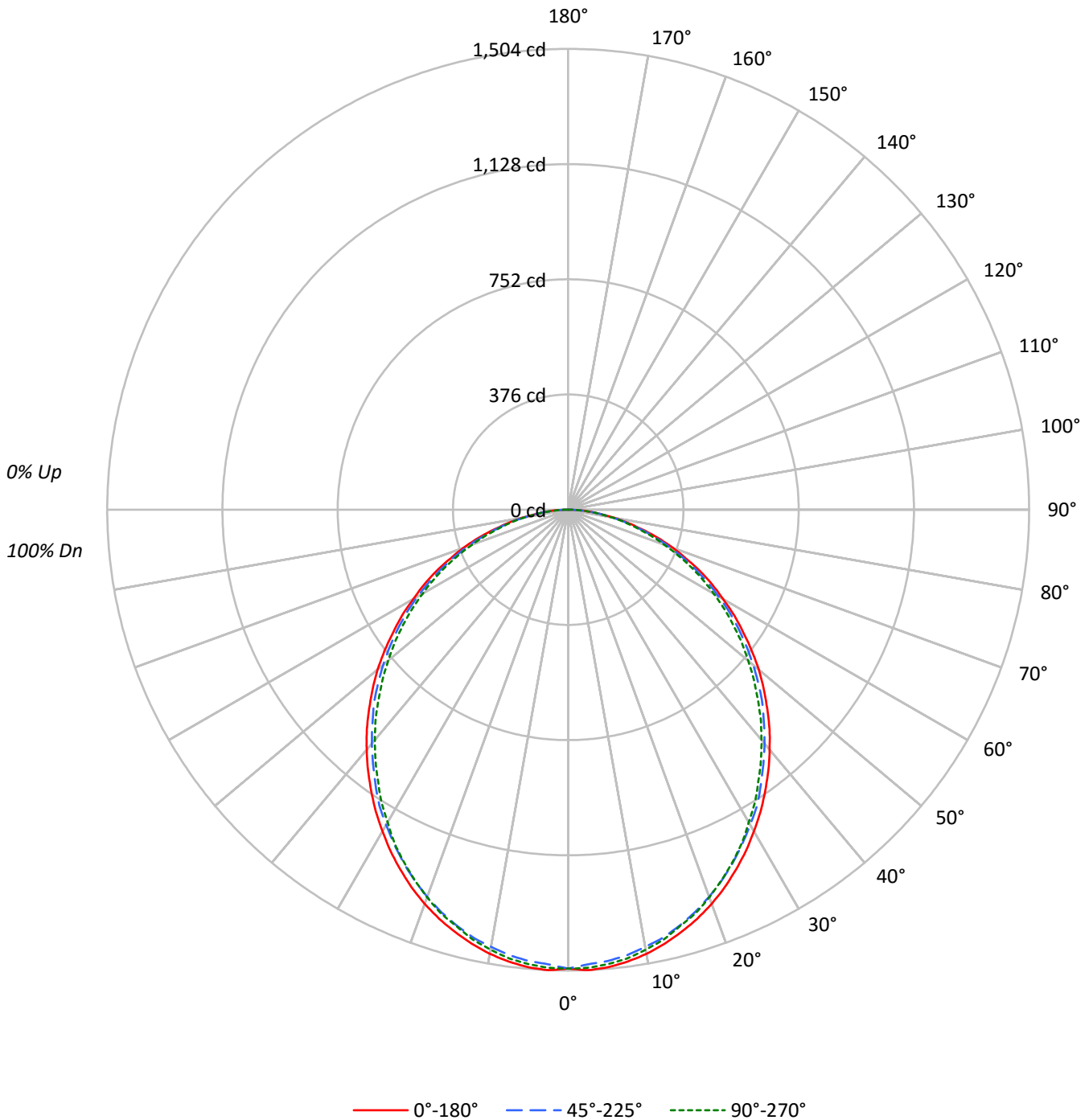
Lumens per Lamp: N/A  
Luminaire Lumens: 3897.9 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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



TEST NUMBER: P333998  
CATALOG NUMBER: S123DP-S1000D840-4F0-1E-UDD-F

### Luminous Intensity Polar Plot





TEST NUMBER: P333998

CATALOG NUMBER: S123DP-S1000D840-4F0-1E-UDD-F

**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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	16121	16121	16121
5°	16197	15974	16085
10°	16089	15835	15934
15°	15901	15657	15686
20°	15682	15401	15416
25°	15387	15096	15066
30°	15062	14758	14646
35°	14722	14400	14215
40°	14367	14006	13789
45°	13977	13644	13311
50°	13586	13197	12832
55°	13074	12737	12350
60°	12559	12198	11810
65°	12103	11612	11250
70°	11430	10943	10458
75°	10443	10069	9640
80°	9422	9019	8939
85°	8275	7954	7632



TEST NUMBER: P333998

CATALOG NUMBER: S123DP-S1000D840-4F0-1E-UDD-F

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.2	3.6
10°-20°	398.7	10.2
20°-30°	588.8	15.1
30°-40°	687.7	17.6
40°-50°	691.3	17.7
50°-60°	607.3	15.6
60°-70°	452.3	11.6
70°-80°	257.4	6.6
80°-90°	73.2	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1128.7	29.0
0°-40°	1816.4	46.6
0°-60°	3115.1	79.9
0°-90°	3897.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3897.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1499	1493	1478	1491	1489	142
15°	1427	1422	1405	1415	1408	402
25°	1296	1288	1271	1272	1268	597
35°	1120	1113	1096	1088	1082	701
45°	918	913	896	881	874	709
55°	697	695	679	664	658	624
65°	475	469	456	446	442	469
75°	251	246	242	236	232	268
85°	67	64	64	62	62	76
90°	0	0	0	0	0	



TEST NUMBER: P333998

CATALOG NUMBER: S123DP-S1000D840-4F0-1E-UDD-F

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1497.7	1497.7	1497.7	1497.7	1497.7
2.5°	1504.2	1499.0	1484.9	1497.7	1496.5
5°	1499.0	1492.6	1478.4	1491.3	1488.7
7.5°	1487.4	1481.0	1466.8	1478.4	1477.1
10°	1472.0	1465.5	1448.8	1460.4	1457.8
12.5°	1451.4	1446.2	1430.8	1438.5	1437.2
15°	1426.9	1421.8	1405.0	1415.3	1407.6
17.5°	1399.9	1393.4	1376.7	1384.4	1381.8
20°	1369.0	1361.2	1344.5	1349.6	1345.8
22.5°	1334.2	1326.5	1309.7	1313.6	1308.4
25°	1295.6	1287.8	1271.1	1272.4	1268.5
27.5°	1255.6	1247.9	1229.9	1231.2	1227.3
30°	1211.8	1205.4	1187.4	1187.4	1178.4
32.5°	1168.1	1159.0	1146.2	1137.1	1133.3
35°	1120.4	1112.7	1095.9	1088.2	1081.8
37.5°	1072.8	1062.5	1045.7	1036.7	1032.8
40°	1022.5	1014.8	996.8	986.5	981.3
42.5°	972.3	963.3	945.3	935.0	929.8
45°	918.2	913.1	896.3	880.9	874.4
47.5°	865.4	857.7	842.2	826.8	821.6
50°	811.3	804.9	788.1	774.0	766.3
52.5°	754.7	750.8	732.8	721.2	713.5
55°	696.7	695.4	678.7	664.5	658.1
57.5°	642.6	637.5	624.6	611.7	604.0
60°	583.4	582.1	566.6	555.1	548.6
62.5°	530.6	526.7	511.3	499.7	495.8
65°	475.2	468.8	455.9	445.6	441.7
67.5°	416.0	410.8	400.5	391.5	386.3
70°	363.2	355.4	347.7	338.7	332.3
72.5°	307.8	302.6	293.6	285.9	283.3
75°	251.1	246.0	242.1	235.7	231.8
77.5°	200.9	198.3	193.2	188.0	188.0
80°	152.0	148.1	145.5	144.2	144.2
82.5°	104.3	104.3	104.3	101.7	100.5
85°	67.0	64.4	64.4	61.8	61.8
87.5°	33.5	29.6	28.3	27.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)