

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: P243747

Luminaire Tested: **S125RDR-H1270D840-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P243747  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-66)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125RDR-H1270D840-X4F0-XX-UDD-F-W  
Description: DEFINE 5 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: (184) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

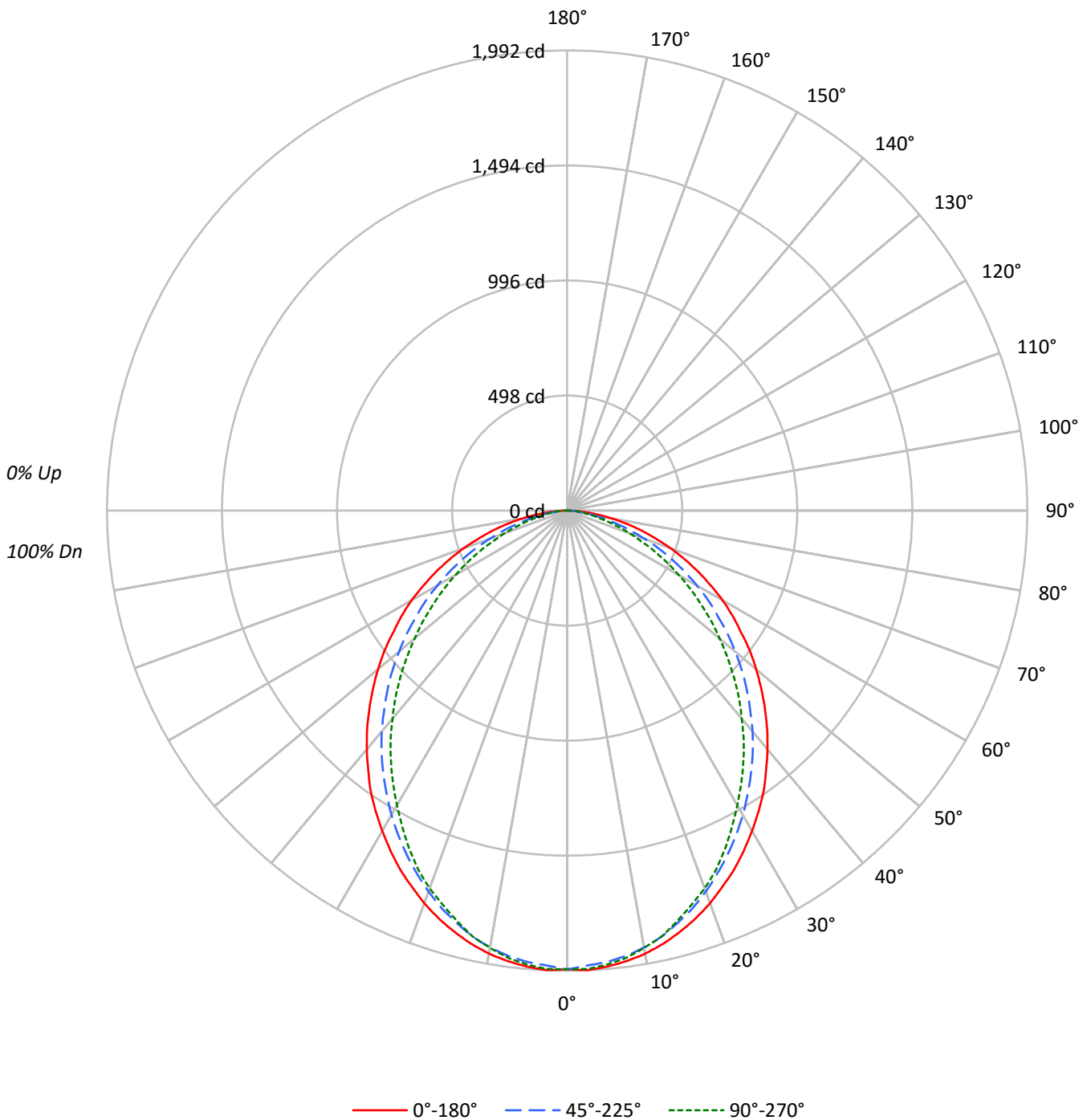
Lumens per Lamp: N/A  
Luminaire Lumens: 4746.7 lumens  
Efficiency: N/A  
Efficacy: 125.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.12 / 1.26  
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.7  
Input Voltage (V): 120  
Input Current (A<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: P243747

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-F-W

### Luminous Intensity Polar Plot





TEST NUMBER: P243747

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-F-W

**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	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78		84	79	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49		60	54	49		58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43		55	48	43		53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39		50	43	38		49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35		46	39	35		45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31		42	36	31		41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29		39	33	29		38	33	28	27

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

	0°	45°	90°
0°	14114	14114	14114
5°	14138	13996	14077
10°	14055	13860	13870
15°	13891	13598	13535
20°	13677	13279	13161
25°	13434	12888	12677
30°	13138	12485	12090
35°	12867	12041	11536
40°	12521	11584	10913
45°	12165	11065	10265
50°	11811	10492	9533
55°	11389	9857	8766
60°	11045	9207	7936
65°	10511	8432	7023
70°	9919	7379	5993
75°	9128	6162	4877
80°	8022	4768	4011
85°	6834	3939	3710



TEST NUMBER: P243747

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-F-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.0	3.9
10°-20°	523.9	11.0
20°-30°	762.4	16.1
30°-40°	873.1	18.4
40°-50°	854.3	18.0
50°-60°	721.3	15.2
60°-70°	505.0	10.6
70°-80°	256.5	5.4
80°-90°	63.1	1.3
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°	1473.3	31.0
0°-40°	2346.4	49.4
0°-60°	3922.1	82.6
0°-90°	4746.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4746.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1986	1986	1986	1986	1986	
5°	1982	1977	1962	1974	1973	188
15°	1888	1881	1848	1847	1840	532
25°	1713	1693	1644	1626	1616	788
35°	1483	1448	1388	1347	1330	926
45°	1210	1170	1101	1043	1021	934
55°	919	879	796	732	707	825
65°	625	577	501	439	418	619
75°	332	291	224	188	178	351
85°	84	54	48	46	46	96
90°	0	0	0	0	0	



TEST NUMBER: P243747

CATALOG NUMBER: S125RDR-H1270D840-X4F0-XX-UDD-F-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1985.8	1985.8	1985.8	1985.8	1985.8
2.5°	1991.5	1987.3	1971.6	1985.8	1985.8
5°	1981.6	1977.3	1961.7	1974.5	1973.1
7.5°	1967.4	1963.1	1944.7	1957.4	1953.2
10°	1947.5	1941.8	1920.5	1927.6	1921.9
12.5°	1920.5	1914.8	1889.3	1892.1	1889.3
15°	1887.8	1880.7	1848.1	1846.6	1839.5
17.5°	1850.9	1841.0	1805.4	1801.2	1789.8
20°	1808.3	1795.5	1755.7	1747.2	1740.1
22.5°	1760.0	1747.2	1700.3	1687.5	1683.3
25°	1713.1	1693.2	1643.5	1626.5	1616.5
27.5°	1657.7	1635.0	1583.8	1561.1	1544.1
30°	1600.9	1575.3	1521.3	1491.5	1473.1
32.5°	1542.7	1512.8	1454.6	1417.7	1402.0
35°	1483.0	1447.5	1387.8	1346.6	1329.6
37.5°	1414.8	1379.3	1319.6	1271.3	1255.7
40°	1349.5	1312.5	1248.6	1196.1	1176.2
42.5°	1281.3	1242.9	1173.3	1117.9	1100.9
45°	1210.3	1170.5	1100.9	1042.6	1021.3
47.5°	1139.2	1099.5	1027.0	968.8	941.8
50°	1068.2	1025.6	948.9	889.2	862.2
52.5°	997.2	950.3	875.0	811.1	787.0
55°	919.1	879.3	795.5	731.6	707.4
57.5°	849.5	805.4	725.9	660.5	633.5
60°	777.0	728.7	647.7	583.8	558.3
62.5°	700.3	652.0	573.9	510.0	487.2
65°	625.0	576.7	501.4	438.9	417.6
67.5°	549.7	504.3	429.0	370.7	346.6
70°	477.3	430.4	355.1	302.6	288.4
72.5°	400.6	363.6	288.4	241.5	230.1
75°	332.4	291.2	224.4	187.5	177.6
77.5°	262.8	223.0	166.2	140.6	132.1
80°	196.0	161.9	116.5	100.9	98.0
82.5°	134.9	102.3	76.7	73.9	72.4
85°	83.8	54.0	48.3	45.5	45.5
87.5°	35.5	22.7	22.7	21.3	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)