

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: P334087

Luminaire Tested: **S123RDS-S775D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334087  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S123RDS-S775D940-4F0-1E-UDD-F  
Description: DEFINE 3 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 775 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

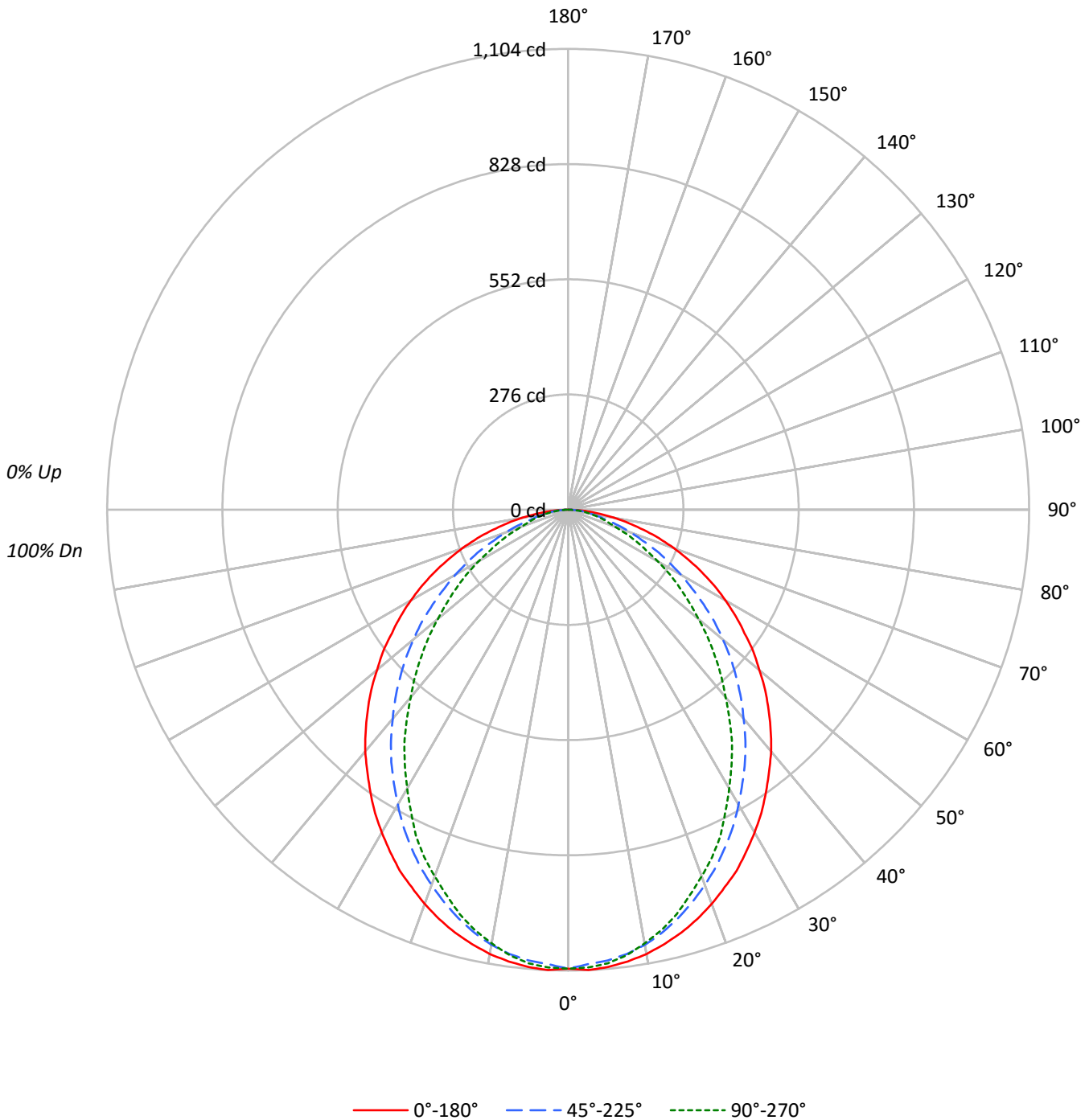
Lumens per Lamp: N/A  
Luminaire Lumens: 2483.9 lumens  
Efficiency: N/A  
Efficacy: 94.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22  
Luminous Opening: Rectangular (W 0.25' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 26.3  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29	28

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

	0°	45°	90°
0°	11835	11835	11835
5°	11880	11716	11784
10°	11813	11569	11530
15°	11686	11299	11179
20°	11512	10960	10704
25°	11332	10580	10241
30°	11094	10141	9587
35°	10850	9701	8987
40°	10626	9184	8244
45°	10330	8674	7575
50°	10004	8093	6824
55°	9672	7430	6125
60°	9369	6719	5356
65°	8970	5950	4587
70°	8475	4995	3704
75°	7752	3930	3485
80°	6912	3484	3205
85°	5842	3088	2865



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.4	4.2
10°-20°	287.5	11.6
20°-30°	414.0	16.7
30°-40°	466.2	18.8
40°-50°	446.0	18.0
50°-60°	365.0	14.7
60°-70°	246.1	9.9
70°-80°	123.4	5.0
80°-90°	32.3	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°	804.9	32.4
0°-40°	1271.1	51.2
0°-60°	2082.1	83.8
0°-90°	2483.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2483.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1100	1100	1100	1100	1100	
5°	1100	1095	1084	1092	1091	104
15°	1049	1039	1014	1009	1003	296
25°	954	932	891	872	862	439
35°	826	794	738	700	684	517
45°	679	638	570	519	498	524
55°	515	472	396	344	326	462
65°	352	303	234	190	180	349
75°	186	144	94	86	84	199
85°	47	28	25	23	23	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1099.5	1099.5	1099.5	1099.5	1099.5
2.5°	1103.9	1100.4	1089.7	1099.5	1097.7
5°	1099.5	1095.0	1084.3	1092.3	1090.6
7.5°	1091.5	1087.0	1073.6	1079.0	1076.3
10°	1080.8	1074.5	1058.5	1059.4	1054.9
12.5°	1065.6	1058.5	1038.0	1037.1	1031.7
15°	1048.7	1038.8	1013.9	1009.4	1003.2
17.5°	1028.1	1017.4	986.2	977.3	968.4
20°	1005.0	990.7	956.8	945.2	934.5
22.5°	979.1	962.2	925.6	910.4	900.6
25°	954.1	931.8	890.8	872.1	862.3
27.5°	923.8	899.7	855.2	830.2	815.0
30°	892.6	865.9	815.9	785.6	771.3
32.5°	861.4	830.2	776.7	742.8	727.6
35°	825.7	793.6	738.3	700.0	683.9
37.5°	790.1	755.3	697.3	654.5	634.9
40°	756.2	716.9	653.6	607.3	586.7
42.5°	717.8	678.6	612.6	560.9	543.1
45°	678.6	638.5	569.8	519.0	497.6
47.5°	640.2	595.7	527.9	472.6	453.9
50°	597.4	555.5	483.3	428.0	407.5
52.5°	559.1	512.7	441.4	383.4	365.6
55°	515.4	471.7	395.9	344.2	326.4
57.5°	476.2	428.9	352.2	303.2	288.0
60°	435.2	386.1	312.1	263.9	248.8
62.5°	394.1	345.1	271.1	226.5	210.4
65°	352.2	303.2	233.6	189.9	180.1
67.5°	310.3	260.4	192.6	159.6	148.9
70°	269.3	221.1	158.7	127.5	117.7
72.5°	228.3	181.0	125.7	101.7	99.0
75°	186.4	143.6	94.5	85.6	83.8
77.5°	148.0	108.8	74.0	68.7	66.9
80°	111.5	74.9	56.2	53.5	51.7
82.5°	76.7	46.4	40.1	37.5	37.5
85°	47.3	27.6	25.0	23.2	23.2
87.5°	21.4	11.6	11.6	10.7	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)