

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: P334072

Luminaire Tested: **S123RDP-S775D927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334072  
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: S123RDP-S775D927-4F0-1E-UDD-F  
Description: DEFINE 3 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 775 LUMENS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2206.7 lumens  
Efficiency: N/A  
Efficacy: 83.9 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

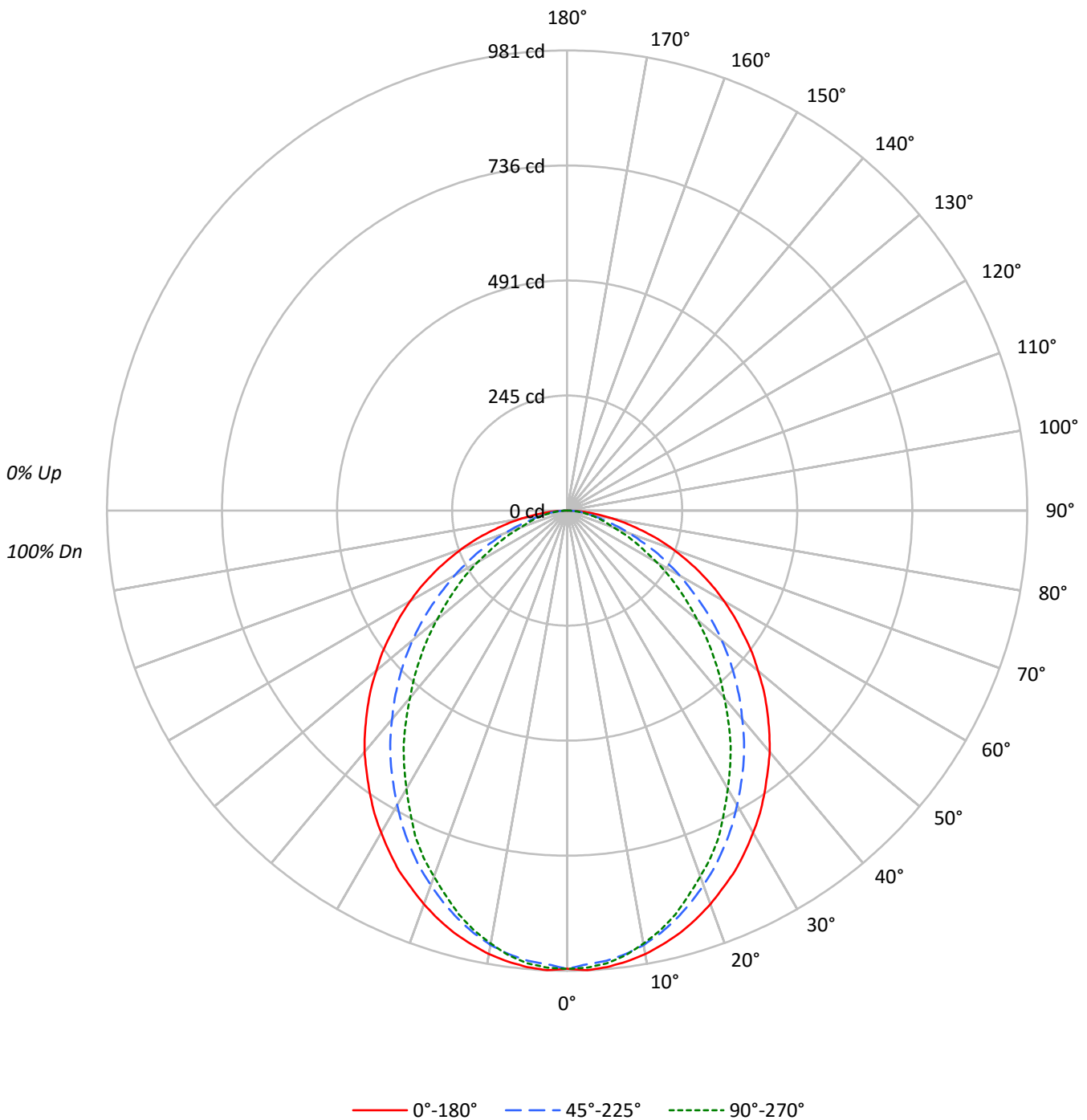
Input Watts (W): 26.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	10514	10514	10514
5°	10554	10408	10468
10°	10494	10277	10244
15°	10381	10037	9931
20°	10227	9737	9510
25°	10067	9399	9098
30°	9856	9009	8516
35°	9640	8619	7984
40°	9440	8160	7325
45°	9178	7706	6728
50°	8889	7191	6062
55°	8593	6600	5440
60°	8323	5970	4758
65°	7969	5287	4075
70°	7528	4437	3292
75°	6887	3493	3098
80°	6137	3093	2845
85°	5187	2742	2544



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	4.2
10°-20°	255.4	11.6
20°-30°	367.8	16.7
30°-40°	414.2	18.8
40°-50°	396.2	18.0
50°-60°	324.3	14.7
60°-70°	218.6	9.9
70°-80°	109.7	5.0
80°-90°	28.7	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°	715.0	32.4
0°-40°	1129.2	51.2
0°-60°	1849.7	83.8
0°-90°	2206.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2206.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	977	977	977	977	977	
5°	977	973	963	970	969	93
15°	932	923	901	897	891	263
25°	848	828	791	775	766	390
35°	734	705	656	622	608	459
45°	603	567	506	461	442	465
55°	458	419	352	306	290	411
65°	313	269	208	169	160	310
75°	166	128	84	76	74	176
85°	42	25	22	21	21	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	976.8	976.8	976.8	976.8	976.8
2.5°	980.7	977.6	968.0	976.8	975.2
5°	976.8	972.8	963.3	970.4	968.8
7.5°	969.6	965.7	953.8	958.5	956.2
10°	960.1	954.6	940.3	941.1	937.2
12.5°	946.7	940.3	922.1	921.3	916.6
15°	931.6	922.9	900.7	896.8	891.2
17.5°	913.4	903.9	876.2	868.2	860.3
20°	892.8	880.1	850.0	839.7	830.2
22.5°	869.8	854.8	822.3	808.8	800.1
25°	847.6	827.8	791.4	774.8	766.0
27.5°	820.7	799.3	759.7	737.5	724.1
30°	793.0	769.2	724.8	697.9	685.2
32.5°	765.2	737.5	690.0	659.9	646.4
35°	733.6	705.0	655.9	621.9	607.6
37.5°	701.9	671.0	619.5	581.5	564.0
40°	671.8	636.9	580.7	539.5	521.3
42.5°	637.7	602.9	544.2	498.3	482.4
45°	602.9	567.2	506.2	461.1	442.0
47.5°	568.8	529.2	469.0	419.9	403.2
50°	530.8	493.5	429.4	380.2	362.0
52.5°	496.7	455.5	392.1	340.6	324.8
55°	457.9	419.1	351.7	305.8	289.9
57.5°	423.0	381.0	312.9	269.3	255.9
60°	386.6	343.0	277.3	234.5	221.0
62.5°	350.1	306.6	240.8	201.2	187.0
65°	312.9	269.3	207.6	168.7	160.0
67.5°	275.7	231.3	171.1	141.8	132.3
70°	239.2	196.5	141.0	113.3	104.6
72.5°	202.8	160.8	111.7	90.3	87.9
75°	165.6	127.5	84.0	76.0	74.5
77.5°	131.5	96.6	65.8	61.0	59.4
80°	99.0	66.5	49.9	47.5	45.9
82.5°	68.1	41.2	35.6	33.3	33.3
85°	42.0	24.6	22.2	20.6	20.6
87.5°	19.0	10.3	10.3	9.5	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)