

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: P334234

Luminaire Tested: **S124RDW-S1195D830-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334234  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124RDW-S1195D830-4F0-1E-UDD-F  
Description: DEFINE 4 REGRESSED DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1195 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4215.4 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

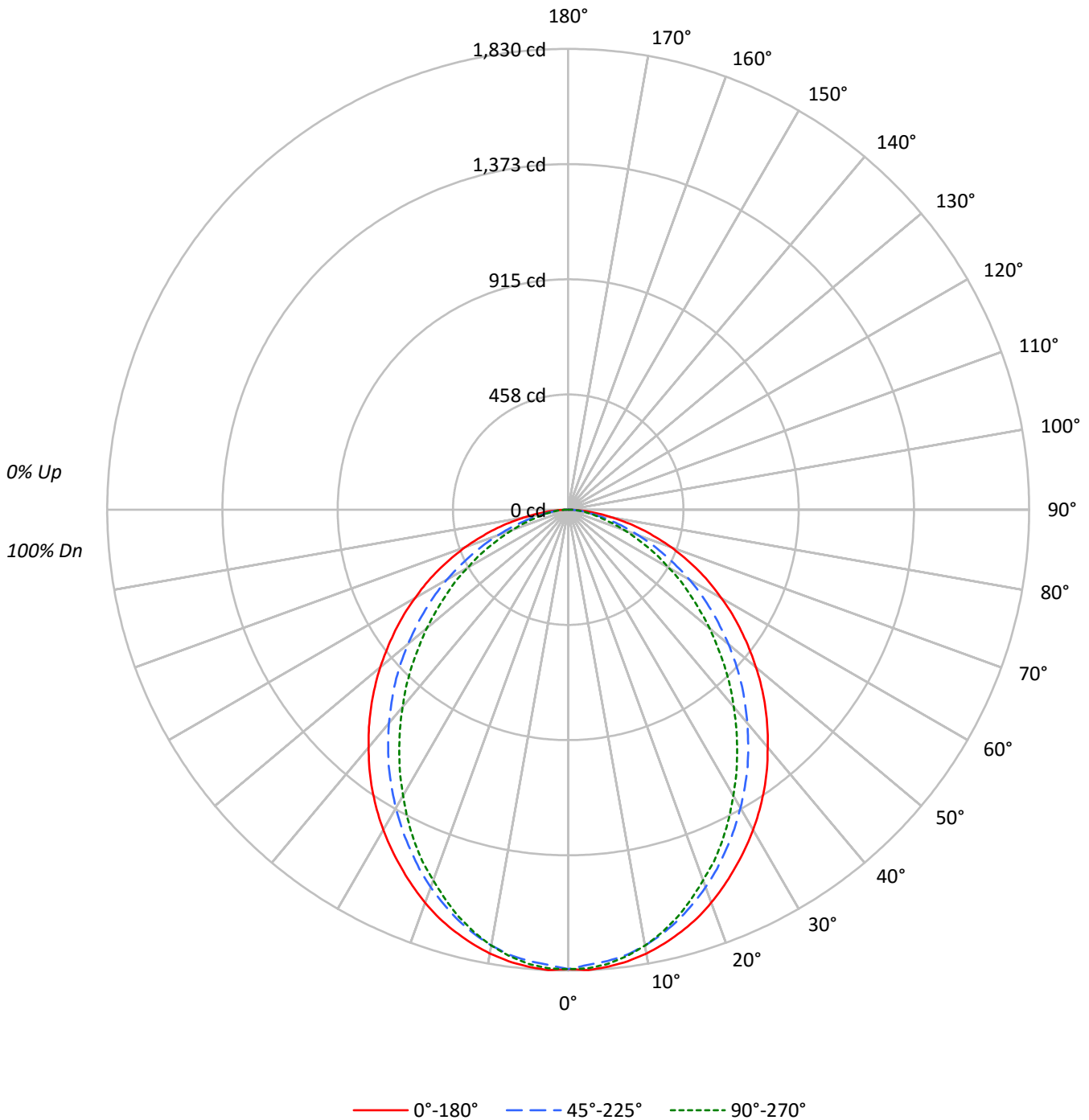
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	92	90	91	89	87					85				
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64					62				
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56					54				
5	78	66	57	51	76	65	56	50	62	55	50	61	54	49	59	53	49					47				
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43					41				
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39					37				
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35					33				
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32					30				
10	55	42	35	29	54	42	34	29	41	34	29	40	33	29	39	33	29					27				

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

	0°	45°	90°
0°	14728	14728	14728
5°	14762	14580	14671
10°	14669	14405	14405
15°	14501	14104	13998
20°	14269	13705	13453
25°	13973	13239	12903
30°	13686	12749	12214
35°	13368	12239	11523
40°	12984	11660	10776
45°	12632	11085	10016
50°	12229	10422	9211
55°	11797	9733	8336
60°	11323	8977	7443
65°	10886	8032	6564
70°	10253	6989	5573
75°	9454	5795	4532
80°	8247	4417	4156
85°	6984	4011	3751



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.6	4.1
10°-20°	478.3	11.3
20°-30°	690.6	16.4
30°-40°	782.7	18.6
40°-50°	755.7	17.9
50°-60°	628.2	14.9
60°-70°	433.6	10.3
70°-80°	219.1	5.2
80°-90°	55.7	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°	1340.5	31.8
0°-40°	2123.1	50.4
0°-60°	3507.0	83.2
0°-90°	4215.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4215.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1824	1824	1824	1824	1824	
5°	1822	1816	1799	1813	1810	173
15°	1735	1722	1688	1685	1675	489
25°	1569	1544	1486	1463	1449	723
35°	1356	1312	1242	1194	1169	848
45°	1106	1055	971	902	877	853
55°	838	782	692	619	592	750
65°	570	510	420	360	344	563
75°	303	251	186	154	145	320
85°	75	48	43	40	40	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1824.4	1824.4	1824.4	1824.4	1824.4
2.5°	1830.0	1824.4	1809.0	1824.4	1823.0
5°	1821.6	1816.0	1799.2	1813.2	1810.4
7.5°	1809.0	1803.4	1782.5	1792.2	1788.1
10°	1789.5	1782.5	1757.3	1762.9	1757.3
12.5°	1764.3	1755.9	1725.2	1728.0	1719.6
15°	1735.0	1722.4	1687.5	1684.7	1674.9
17.5°	1701.4	1683.3	1642.8	1635.8	1621.8
20°	1660.9	1642.8	1595.3	1584.1	1565.9
22.5°	1616.2	1595.3	1543.6	1525.4	1511.5
25°	1568.7	1543.6	1486.3	1462.6	1448.6
27.5°	1519.8	1489.1	1429.0	1401.1	1381.6
30°	1468.2	1433.2	1367.6	1332.7	1310.3
32.5°	1413.7	1373.2	1304.7	1262.8	1241.9
35°	1356.4	1311.7	1241.9	1194.4	1169.2
37.5°	1296.3	1250.2	1173.4	1121.7	1096.6
40°	1232.1	1186.0	1106.4	1047.7	1022.5
42.5°	1170.6	1121.7	1037.9	977.8	951.3
45°	1106.4	1054.7	970.9	902.4	877.3
47.5°	1040.7	987.6	901.0	829.8	801.8
50°	973.7	919.2	829.8	759.9	733.4
52.5°	905.2	852.1	759.9	688.7	660.7
55°	838.2	782.3	691.5	618.8	592.3
57.5°	772.5	713.8	624.4	550.4	530.8
60°	701.3	645.4	556.0	483.3	461.0
62.5°	637.0	578.3	486.1	420.5	403.7
65°	569.9	509.9	420.5	360.4	343.6
67.5°	500.1	442.8	359.0	305.9	286.4
70°	434.4	375.8	296.1	250.0	236.1
72.5°	364.6	312.9	238.9	201.2	188.6
75°	303.1	251.4	185.8	153.7	145.3
77.5°	238.9	194.2	138.3	115.9	113.2
80°	177.4	136.9	95.0	90.8	89.4
82.5°	124.3	88.0	68.4	65.7	64.3
85°	75.4	47.5	43.3	40.5	40.5
87.5°	32.1	21.0	19.6	18.2	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)