

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: P334191

Luminaire Tested: **S124DS-S575D940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334191  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DS-S575D940-4F0-1E-UDD-F  
Description: DEFINE 4 DIRECT LED LUMINAIRE, FLUSH SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 575 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2050.9 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29  
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')  
CIE Type: Direct

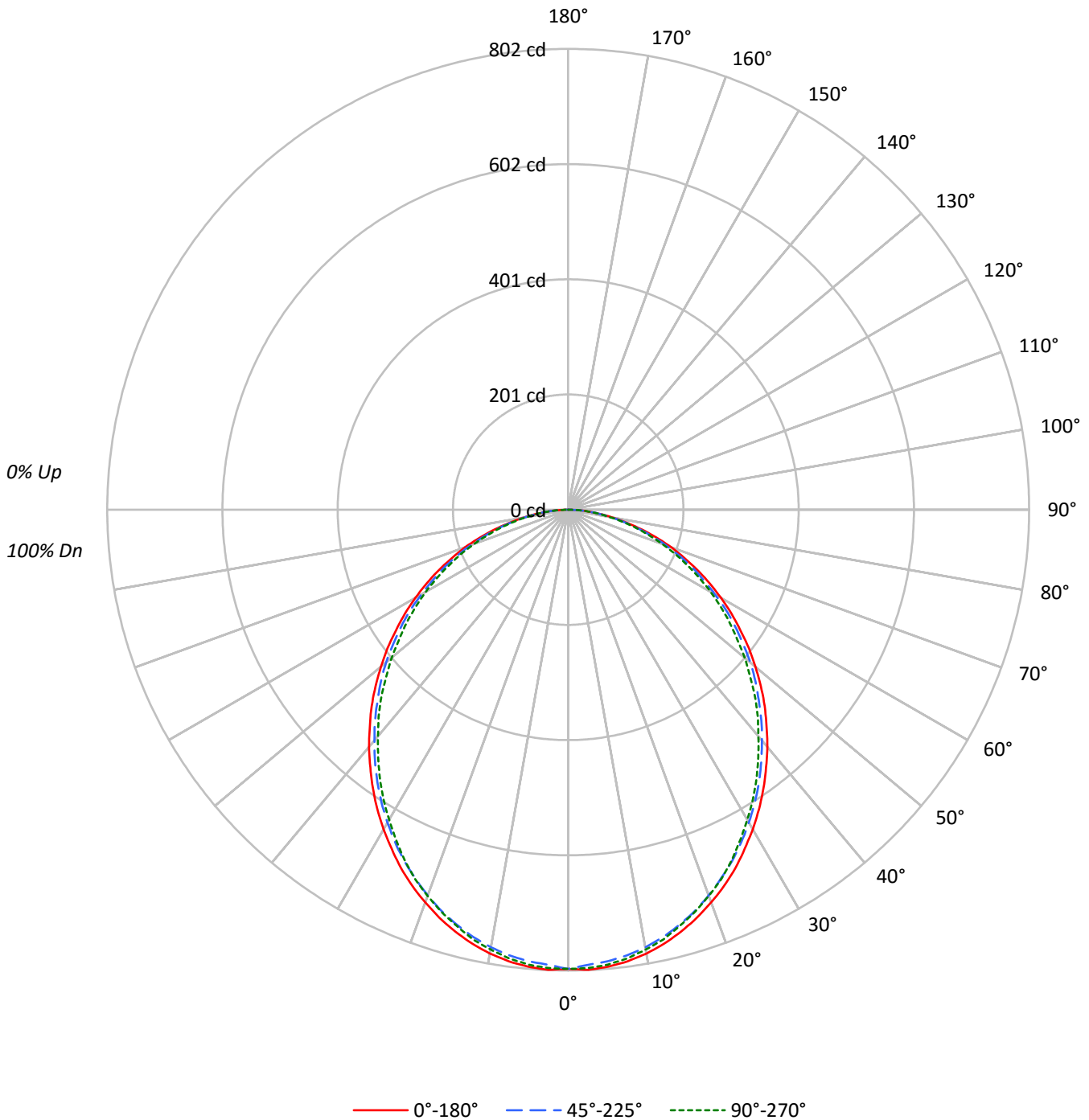
Input Watts (W): 18.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	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	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	6451	6451	6451
5°	6470	6392	6439
10°	6429	6340	6372
15°	6352	6250	6267
20°	6248	6138	6144
25°	6131	6011	5994
30°	5986	5861	5808
35°	5837	5704	5628
40°	5681	5526	5425
45°	5519	5351	5248
50°	5339	5195	5034
55°	5146	4992	4830
60°	4952	4766	4621
65°	4734	4550	4367
70°	4489	4263	4095
75°	4114	3915	3815
80°	3663	3515	3422
85°	3205	3084	3029



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	3.7
10°-20°	212.2	10.3
20°-30°	312.3	15.2
30°-40°	363.0	17.7
40°-50°	363.0	17.7
50°-60°	317.5	15.5
60°-70°	235.7	11.5
70°-80°	133.7	6.5
80°-90°	38.3	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°	599.8	29.2
0°-40°	962.8	46.9
0°-60°	1643.2	80.1
0°-90°	2050.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2050.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	799	799	799	799	799	
5°	798	796	789	796	795	76
15°	760	757	748	752	750	214
25°	688	684	675	676	673	317
35°	592	588	579	574	571	370
45°	483	479	469	462	460	373
55°	366	364	355	347	343	327
65°	248	245	238	232	229	245
75°	132	129	126	123	122	140
85°	35	35	33	33	33	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	799.1	799.1	799.1	799.1	799.1
2.5°	801.6	799.7	792.7	799.1	798.4
5°	798.4	795.9	788.8	795.9	794.6
7.5°	792.7	790.1	782.4	788.2	787.5
10°	784.3	781.8	773.4	778.6	777.3
12.5°	773.4	770.9	761.9	767.7	765.8
15°	760.0	757.4	747.8	751.7	749.8
17.5°	744.6	741.4	732.5	735.0	733.8
20°	727.3	724.1	714.5	716.5	715.2
22.5°	708.8	704.3	694.7	698.5	696.0
25°	688.3	683.8	674.8	675.5	672.9
27.5°	665.2	660.8	652.4	651.2	648.0
30°	642.2	637.1	628.7	626.2	623.0
32.5°	617.9	613.4	604.4	601.2	598.0
35°	592.3	587.8	578.8	574.3	571.1
37.5°	565.4	561.5	551.9	547.4	543.0
40°	539.1	534.0	524.4	518.0	514.8
42.5°	510.9	508.4	497.5	489.8	487.9
45°	483.4	478.9	468.7	461.6	459.7
47.5°	454.6	451.4	441.8	434.1	429.0
50°	425.1	422.6	413.6	404.7	400.8
52.5°	396.3	393.1	383.5	375.8	370.7
55°	365.6	363.7	354.7	347.0	343.2
57.5°	336.8	334.9	325.9	318.2	314.4
60°	306.7	303.5	295.2	289.4	286.2
62.5°	277.2	274.7	265.7	260.6	257.4
65°	247.8	244.6	238.2	231.8	228.6
67.5°	217.7	215.1	208.7	202.3	201.7
70°	190.2	185.7	180.6	175.4	173.5
72.5°	160.7	156.2	152.4	148.5	146.6
75°	131.9	128.7	125.5	122.9	122.3
77.5°	103.7	102.4	99.2	98.6	96.7
80°	78.8	76.8	75.6	74.3	73.6
82.5°	54.4	53.8	53.8	53.1	52.5
85°	34.6	34.6	33.3	33.3	32.7
87.5°	16.6	16.0	15.4	15.4	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)