

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: P334313

Luminaire Tested: **S125DS-S1090D840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P334313  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DS-S1090D840-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT LED LUMINAIRE, DROP SATIN WHITE DIFFUSER  
PENDANT/SURFACE/WALL MOUNT, 1090 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

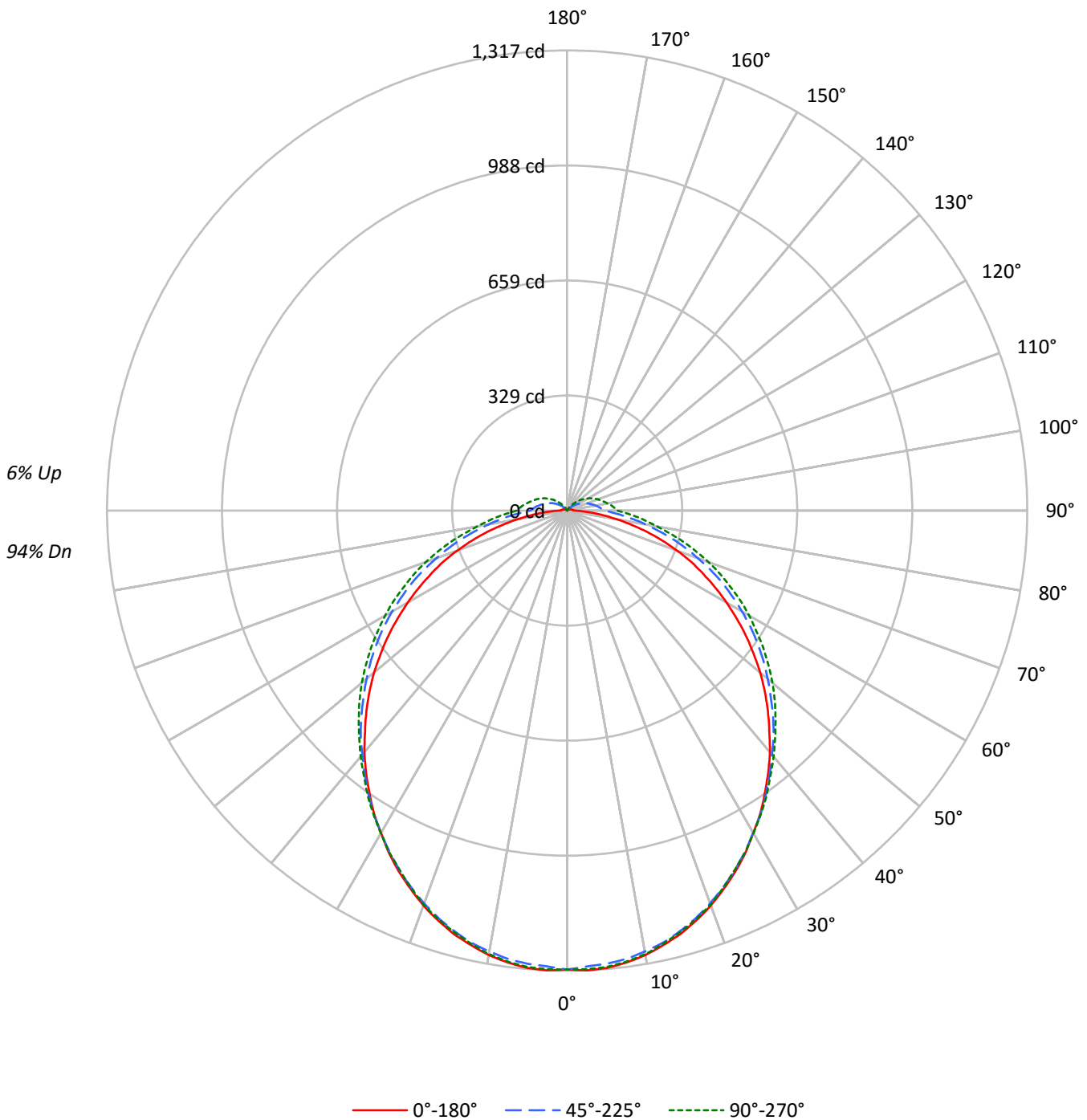
Lumens per Lamp: N/A  
Luminaire Lumens: 4069.3 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.8  
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





TEST NUMBER: P334313

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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

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

	0°	45°	90°
0°	8484	8484	8484
5°	8516	8441	8499
10°	8471	8403	8454
15°	8386	8335	8352
20°	8267	8223	8249
25°	8121	8094	8085
30°	7942	7942	7952
35°	7778	7818	7849
40°	7611	7687	7752
45°	7422	7610	7704
50°	7246	7531	7711
55°	7033	7497	7714
60°	6803	7468	7768
65°	6573	7499	7872
70°	6322	7514	8122
75°	5914	7778	8579
80°	5411	8476	9722
85°	5246	11738	14598



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.3	3.1
10°-20°	352.9	8.7
20°-30°	524.7	12.9
30°-40°	621.4	15.3
40°-50°	642.5	15.8
50°-60°	591.8	14.5
60°-70°	478.4	11.8
70°-80°	320.1	7.9
80°-90°	165.5	4.1
90°-100°	93.2	2.3
100°-110°	68.7	1.7
110°-120°	46.0	1.1
120°-130°	26.0	0.6
130°-140°	11.4	0.3
140°-150°	2.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1001.9	24.6
0°-40°	1623.3	39.9
0°-60°	2857.6	70.2
0°-90°	3821.6	93.9
90°-120°	207.9	5.1
90°-150°	247.6	6.1
90°-180°	248.0	6.1
0°-180°	4069.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1314	1311	1302	1312	1311	125
15°	1254	1256	1247	1254	1249	353
25°	1140	1144	1136	1141	1135	525
35°	986	996	992	996	996	618
45°	813	827	833	842	844	627
55°	625	645	666	680	685	558
65°	430	460	491	510	515	427
75°	237	270	312	337	344	251
85°	71	113	158	187	197	74
90°	21	62	106	135	144	14
95°	17	50	94	122	131	13
105°	12	32	71	97	106	12
115°	8	17	50	73	81	8
125°	5	4	30	50	57	4
135°	3	1	10	27	34	2
145°	1	0	0	6	12	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P334313

CATALOG NUMBER: S125DS-S1090D840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1313.6	1313.6	1313.6	1313.6	1313.6
2.5°	1317.4	1314.9	1305.9	1314.9	1313.6
5°	1313.6	1311.0	1302.0	1312.3	1311.0
7.5°	1304.6	1303.3	1294.3	1303.3	1302.0
10°	1291.7	1291.7	1281.4	1290.4	1289.1
12.5°	1273.7	1274.9	1267.2	1273.7	1269.8
15°	1254.3	1255.6	1246.6	1254.3	1249.2
17.5°	1229.9	1232.4	1223.4	1229.9	1226.0
20°	1202.8	1205.4	1196.4	1200.3	1200.3
22.5°	1171.9	1177.1	1166.8	1171.9	1168.1
25°	1139.7	1143.6	1135.9	1141.0	1134.6
27.5°	1105.0	1110.1	1101.1	1105.0	1102.4
30°	1065.0	1072.8	1065.0	1067.6	1066.3
32.5°	1029.0	1035.4	1030.3	1032.8	1031.5
35°	986.5	995.5	991.6	995.5	995.5
37.5°	945.3	953.0	951.7	956.9	955.6
40°	902.8	913.1	911.8	916.9	919.5
42.5°	856.4	870.6	874.4	880.9	880.9
45°	812.6	826.8	833.2	842.2	843.5
47.5°	767.5	780.4	790.7	803.6	806.2
50°	721.2	735.3	749.5	763.7	767.5
52.5°	672.2	690.3	708.3	723.8	726.3
55°	624.6	645.2	665.8	680.0	685.1
57.5°	575.7	600.1	623.3	638.8	642.6
60°	526.7	552.5	578.2	597.6	601.4
62.5°	479.1	504.8	533.2	555.1	560.2
65°	430.1	459.8	490.7	510.0	515.1
67.5°	385.1	413.4	444.3	467.5	473.9
70°	334.8	364.5	397.9	422.4	430.1
72.5°	285.9	316.8	354.2	381.2	386.3
75°	237.0	270.4	311.7	337.4	343.8
77.5°	189.3	227.9	266.6	294.9	300.1
80°	145.5	184.2	227.9	256.3	261.4
82.5°	105.6	146.8	191.9	218.9	229.2
85°	70.8	113.3	158.4	186.7	197.0
87.5°	45.1	86.3	130.1	159.7	168.7
90°	20.6	61.8	105.6	135.2	144.2
92.5°	18.0	55.4	100.5	128.8	137.8
95°	16.7	50.2	94.0	122.3	131.4
97.5°	15.5	46.4	88.9	115.9	124.9
100°	14.2	41.2	82.4	109.5	117.2
102.5°	12.9	37.3	77.3	103.0	110.8
105°	11.6	32.2	70.8	96.6	105.6
107.5°	10.3	28.3	65.7	91.4	99.2
110°	9.0	24.5	60.5	85.0	94.0



TEST NUMBER: P334313

CATALOG NUMBER: S125DS-S1090D840-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	9.0	20.6	55.4	78.6	87.6
115°	7.7	16.7	50.2	73.4	81.1
117.5°	6.4	12.9	45.1	67.0	76.0
120°	6.4	10.3	39.9	61.8	69.5
122.5°	5.2	6.4	34.8	55.4	63.1
125°	5.2	3.9	29.6	50.2	56.7
127.5°	3.9	2.6	24.5	43.8	51.5
130°	3.9	2.6	20.6	38.6	45.1
132.5°	2.6	2.6	15.5	33.5	38.6
135°	2.6	1.3	10.3	27.0	33.5
137.5°	2.6	1.3	6.4	21.9	27.0
140°	1.3	1.3	2.6	16.7	21.9
142.5°	1.3	0.0	0.0	11.6	16.7
145°	1.3	0.0	0.0	6.4	11.6
147.5°	0.0	0.0	0.0	2.6	5.2
150°	0.0	0.0	0.0	0.0	1.3
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)