

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: P243723

Luminaire Tested: **S125DR-H1270D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P243723
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-H1270D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4068.8 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

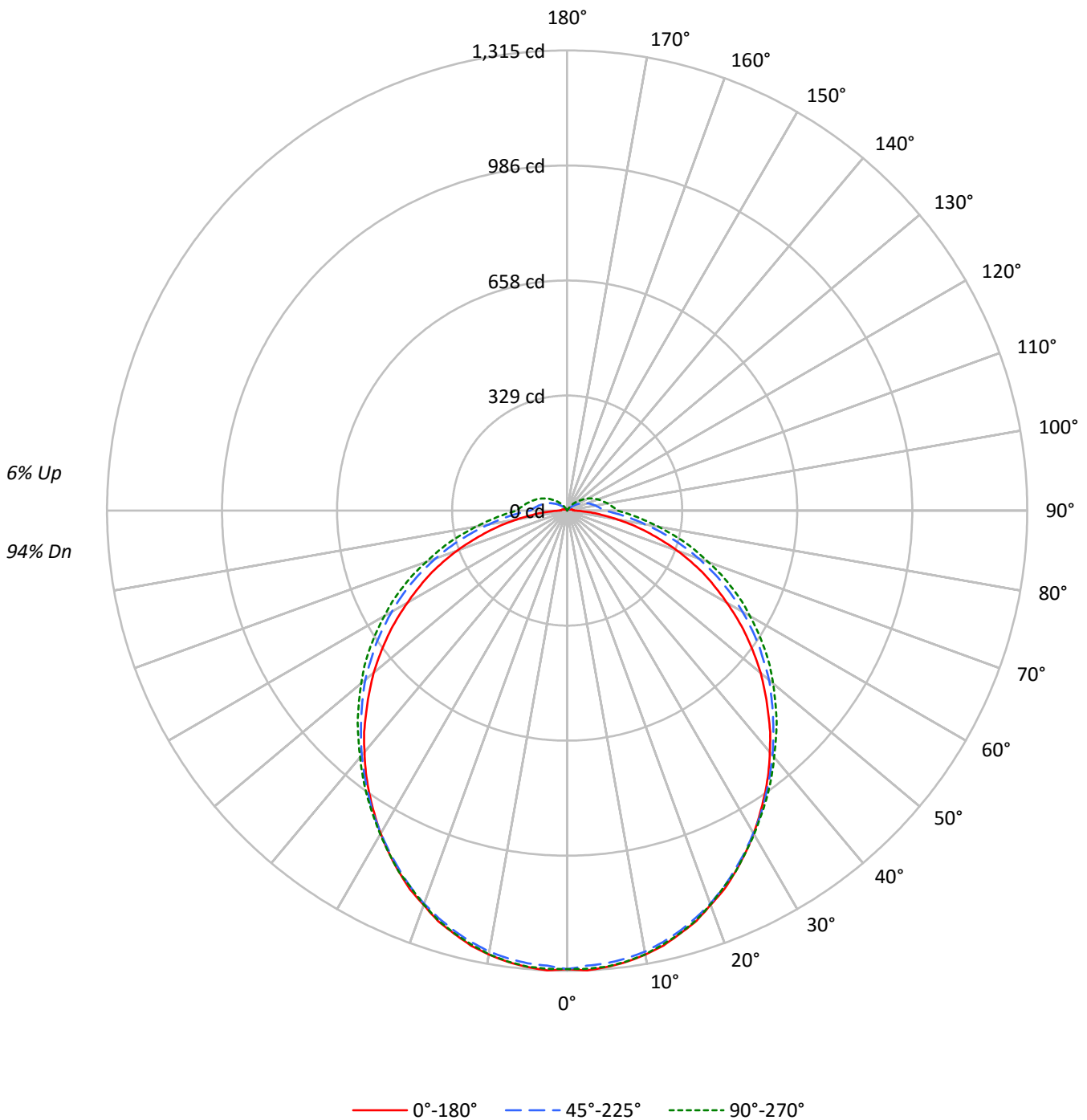
Input Watts (W): 37.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9313	9313	9313
5°	9323	9130	9161
10°	9265	8976	8955
15°	9153	8762	8700
20°	8998	8526	8407
25°	8839	8251	8120
30°	8640	7973	7806
35°	8426	7701	7524
40°	8212	7437	7244
45°	7984	7172	7014
50°	7782	6954	6770
55°	7527	6684	6546
60°	7219	6392	6261
65°	6971	6084	5982
70°	6559	5705	5618
75°	6004	5257	5297
80°	5344	4776	4891
85°	4759	4467	4655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.0	3.0
10°-20°	352.3	8.7
20°-30°	524.4	12.9
30°-40°	621.3	15.3
40°-50°	642.8	15.8
50°-60°	592.9	14.6
60°-70°	479.1	11.8
70°-80°	320.2	7.9
80°-90°	165.2	4.1
90°-100°	92.6	2.3
100°-110°	68.7	1.7
110°-120°	45.8	1.1
120°-130°	25.6	0.6
130°-140°	11.5	0.3
140°-150°	2.4	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1000.7	24.6
0°-40°	1622.0	39.9
0°-60°	2857.7	70.2
0°-90°	3822.2	93.9
90°-120°	207.1	5.1
90°-150°	246.6	6.1
90°-180°	247.0	6.1
0°-180°	4068.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1310	1310	1310	1310	1310	
5°	1309	1308	1298	1308	1308	124
15°	1251	1255	1244	1251	1250	353
25°	1138	1143	1134	1140	1138	524
35°	986	993	991	996	997	617
45°	811	825	832	845	847	627
55°	626	646	667	683	689	559
65°	434	459	490	512	518	428
75°	236	271	310	337	346	251
85°	73	114	159	186	196	75
90°	21	61	105	134	144	14
95°	17	51	93	121	130	13
105°	12	33	72	97	105	13
115°	8	17	50	73	81	8
125°	5	5	29	47	56	5
135°	2	2	11	28	33	2
145°	1	0	0	7	11	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1310.4	1310.4	1310.4	1310.4	1310.4
2.5°	1315.3	1311.6	1301.9	1311.6	1310.4
5°	1309.2	1308.0	1298.3	1308.0	1308.0
7.5°	1300.7	1299.5	1291.0	1300.7	1299.5
10°	1288.6	1288.6	1280.1	1287.4	1287.4
12.5°	1272.9	1272.9	1263.2	1271.7	1269.2
15°	1251.1	1254.7	1243.8	1251.1	1249.9
17.5°	1229.3	1229.3	1220.8	1226.8	1226.8
20°	1199.0	1203.8	1195.4	1201.4	1197.8
22.5°	1172.3	1174.8	1166.3	1172.3	1166.3
25°	1138.4	1143.3	1133.6	1139.6	1138.4
27.5°	1103.3	1106.9	1099.7	1106.9	1103.3
30°	1065.8	1069.4	1064.6	1069.4	1068.2
32.5°	1025.8	1033.1	1029.4	1033.1	1031.9
35°	985.8	993.1	990.7	995.5	996.7
37.5°	944.7	951.9	951.9	958.0	959.2
40°	901.1	910.7	913.2	921.6	920.4
42.5°	858.7	868.4	872.0	882.9	882.9
45°	811.4	824.8	832.0	845.3	846.6
47.5°	766.6	781.2	792.1	804.2	806.6
50°	721.8	735.1	753.3	765.4	767.8
52.5°	673.4	690.3	708.5	725.4	730.3
55°	626.1	645.5	667.3	683.1	689.1
57.5°	577.7	598.3	622.5	641.9	646.7
60°	526.8	551.0	578.9	598.3	603.1
62.5°	479.6	506.2	535.3	555.9	563.2
65°	433.6	459.0	490.5	512.3	518.3
67.5°	383.9	411.8	444.5	468.7	474.8
70°	334.3	364.5	399.7	422.7	428.7
72.5°	283.4	317.3	354.9	380.3	387.6
75°	236.2	271.3	310.0	336.7	346.4
77.5°	191.4	227.7	266.4	294.3	302.8
80°	146.5	184.1	226.5	255.5	264.0
82.5°	106.6	146.5	190.1	219.2	227.7
85°	72.7	113.8	158.7	186.5	196.2
87.5°	44.8	84.8	130.8	158.7	168.3
90°	20.6	60.6	105.4	134.4	144.1
92.5°	18.2	55.7	99.3	128.4	136.9
95°	17.0	50.9	93.3	121.1	129.6
97.5°	15.7	46.0	87.2	115.1	123.5
100°	14.5	41.2	82.4	109.0	117.5
102.5°	13.3	37.5	76.3	102.9	110.2
105°	12.1	32.7	71.5	96.9	105.4
107.5°	10.9	27.9	66.6	90.8	99.3
110°	9.7	24.2	60.6	84.8	93.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.5	20.6	55.7	78.7	87.2
115°	8.5	17.0	49.7	72.7	81.1
117.5°	7.3	13.3	43.6	66.6	75.1
120°	6.1	9.7	38.8	60.6	69.0
122.5°	6.1	7.3	33.9	54.5	63.0
125°	4.8	4.8	29.1	47.2	55.7
127.5°	4.8	3.6	24.2	42.4	48.4
130°	3.6	2.4	20.6	37.5	43.6
132.5°	3.6	2.4	15.7	32.7	38.8
135°	2.4	2.4	10.9	27.9	32.7
137.5°	2.4	1.2	7.3	21.8	27.9
140°	1.2	1.2	2.4	17.0	21.8
142.5°	1.2	1.2	1.2	12.1	17.0
145°	1.2	0.0	0.0	7.3	10.9
147.5°	1.2	0.0	0.0	2.4	6.1
150°	0.0	0.0	0.0	0.0	1.2
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)