

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: P231585

Luminaire Tested: **S125-DR-1-35-X-0048-1-U-DD-3-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231585  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29678)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125-DR-1-35-X-0048-1-U-DD-3-W  
Description: DEFINE 5 LED LINEAR DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC LENS.  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3119.7 lumens  
Efficiency: N/A  
Efficacy: 112.2 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1.24 / 1.52  
Luminous Opening: Rectangular (W 3.92' x L: 0.39' x H: 0')  
CIE Type: Direct

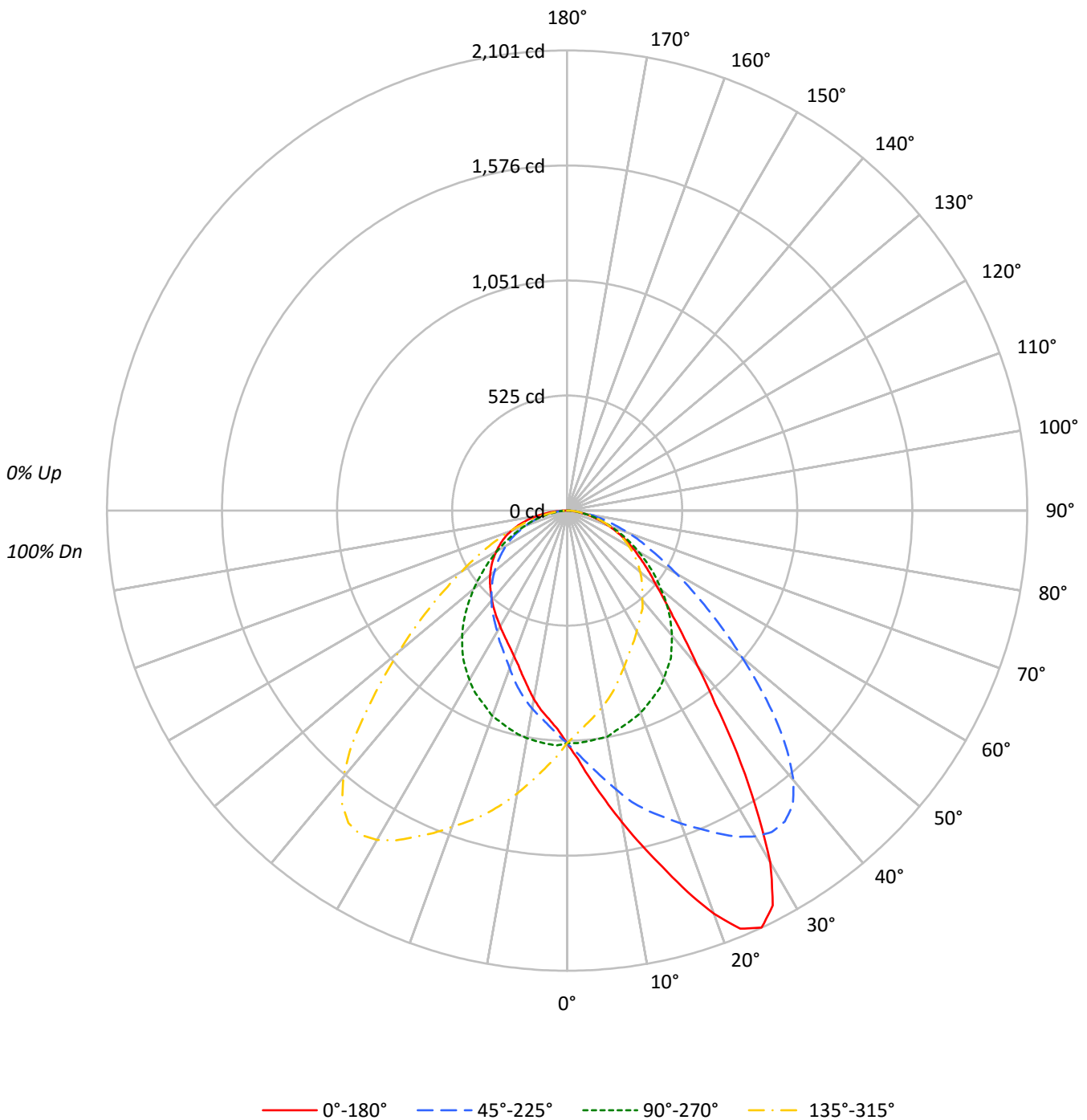
Input Watts (W): 27.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87					85				
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64					61				
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55					53				
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48					46				
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43					41				
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38					36				
8	62	49	41	35	61	48	40	35	47	40	35	46	39	34	45	39	34					32				
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31					29				
10	54	42	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28					26				

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

	0°	90°	180°	270°
0°	7484	7484	7484	7484
5°	8715	7484	6755	7562
10°	10340	7506	6254	7549
15°	12285	7397	5705	7507
20°	14690	7364	5309	7484
25°	16336	7278	5085	7371
30°	15094	7185	4972	7258
35°	11630	7097	4921	7114
40°	8500	6844	4912	6862
45°	6806	6537	4943	6517
50°	5810	6139	5032	6095
55°	5307	5762	5148	5639
60°	4919	5313	5271	5200
65°	4535	4902	5436	4752
70°	4100	4368	5604	4224
75°	3621	3866	5663	3757
80°	3003	3165	5559	3125
85°	2183	2426	5255	2426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.6	3.3
10°-20°	320.7	10.3
20°-30°	533.0	17.1
30°-40°	620.7	19.9
40°-50°	559.4	17.9
50°-60°	449.0	14.4
60°-70°	316.4	10.1
70°-80°	171.4	5.5
80°-90°	45.7	1.5
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°	957.3	30.7
0°-40°	1578.0	50.6
0°-60°	2586.3	82.9
0°-90°	3119.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3119.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1062	1062	1062	1062	1062	
5°	1232	1058	955	1069	1232	124
15°	1684	1014	782	1029	1684	487
25°	2101	936	654	948	2101	937
35°	1352	825	572	827	1352	845
45°	683	656	496	654	683	539
55°	432	469	419	459	432	389
65°	272	294	326	285	272	270
75°	133	142	208	138	133	142
85°	27	30	65	30	27	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1062	1062	1062	1062	1062	1062	1062	1062	1062	1062	1062
2.5°	1136	1126	1111	1080	1063	1030	1019	1009	998	1005	1022
5°	1232	1204	1166	1103	1058	1004	981	963	955	960	983
7.5°	1334	1295	1228	1128	1052	979	947	925	917	922	949
10°	1445	1389	1294	1155	1049	960	913	884	874	882	918
12.5°	1562	1483	1362	1171	1029	928	878	839	826	838	884
15°	1684	1598	1418	1189	1014	901	840	795	782	795	847
17.5°	1824	1709	1467	1203	998	872	797	753	741	754	807
20°	1959	1822	1520	1213	982	846	760	717	708	716	766
22.5°	2066	1922	1571	1205	959	809	723	688	679	684	730
25°	2101	2008	1626	1193	936	774	691	667	654	658	697
27.5°	2033	2021	1679	1172	915	740	665	641	632	635	670
30°	1855	1949	1718	1148	883	711	635	614	611	614	638
32.5°	1602	1805	1740	1114	852	672	610	592	591	589	612
35°	1352	1585	1733	1079	825	641	584	570	572	568	587
37.5°	1110	1348	1693	1043	783	618	565	549	553	548	564
40°	924	1134	1608	1001	744	582	534	529	534	527	537
42.5°	793	955	1488	959	701	554	509	508	515	507	511
45°	683	808	1347	913	656	522	484	486	496	486	486
47.5°	601	694	1191	864	611	493	460	465	478	465	461
50°	530	605	1042	812	560	466	435	443	459	442	433
52.5°	480	533	905	756	515	434	409	420	439	420	405
55°	432	472	781	697	469	403	381	397	419	398	378
57.5°	388	421	671	635	422	372	354	373	396	373	350
60°	349	374	576	571	377	339	326	348	374	348	321
62.5°	310	330	492	506	334	305	297	321	350	321	294
65°	272	289	418	440	294	271	268	293	326	293	264
67.5°	234	247	358	378	251	235	235	265	301	264	230
70°	199	209	297	319	212	202	205	234	272	232	200
72.5°	165	173	239	258	176	169	174	205	241	203	172
75°	133	139	190	207	142	138	144	174	208	173	142
77.5°	103	108	144	157	108	108	114	147	173	145	113
80°	74	78	104	113	78	80	87	113	137	112	85
82.5°	49	52	69	75	52	54	61	86	100	82	60
85°	27	29	40	43	30	33	39	54	65	56	38
87.5°	10	11	17	18	13	15	20	29	34	30	20
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1062	1062	1062	1062	1062	1062
2.5°	1035	1073	1091	1125	1140	1136
5°	1009	1069	1116	1183	1220	1232
7.5°	985	1063	1143	1246	1315	1334
10°	956	1055	1168	1311	1411	1445
12.5°	934	1045	1195	1374	1512	1562
15°	904	1029	1210	1433	1616	1684
17.5°	876	1012	1224	1486	1732	1824
20°	845	998	1230	1537	1851	1959
22.5°	812	971	1227	1593	1960	2066
25°	775	948	1213	1643	2031	2101
27.5°	741	925	1191	1698	2038	2033
30°	708	892	1165	1736	1959	1855
32.5°	674	860	1130	1755	1792	1602
35°	642	827	1095	1741	1567	1352
37.5°	611	787	1057	1688	1323	1110
40°	580	746	1016	1589	1107	924
42.5°	552	701	974	1460	932	793
45°	521	654	926	1296	795	683
47.5°	495	605	877	1145	683	601
50°	464	556	823	1003	594	530
52.5°	431	507	764	875	523	480
55°	399	459	703	755	465	432
57.5°	370	414	639	648	414	388
60°	335	369	573	555	366	349
62.5°	304	326	506	476	322	310
65°	267	285	439	406	282	272
67.5°	231	243	376	339	241	234
70°	201	205	311	281	203	199
72.5°	168	173	255	225	168	165
75°	136	138	200	178	136	133
77.5°	106	106	150	134	104	103
80°	78	77	107	96	76	74
82.5°	53	51	70	63	50	49
85°	32	30	40	37	28	27
87.5°	16	15	17	15	10	10
90°	0	0	0	0	0	0

(END OF REPORT)