

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: P24188

Luminaire Tested: **S901DIP-1L35-D02XXU**

Issue Date: 3/3/2020

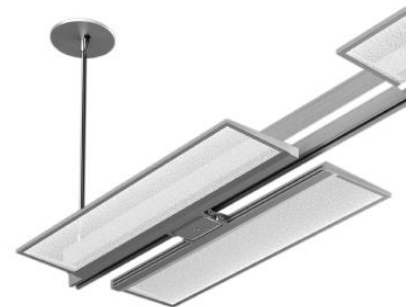
Test Information

Test Method: LM-79-08
Report Number: P24188
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S901DIP-1L35-D02XXU
Description: NEORAY INDEX SUSPENDED WITH 1 FOOT WING YOKE (UP)
Light Source: (84) 3500K LEDS
Ballast/Driver: (1) ADVANCE ELECTRONIC DRIVERS
LEDINTA2000C24DO

Summary

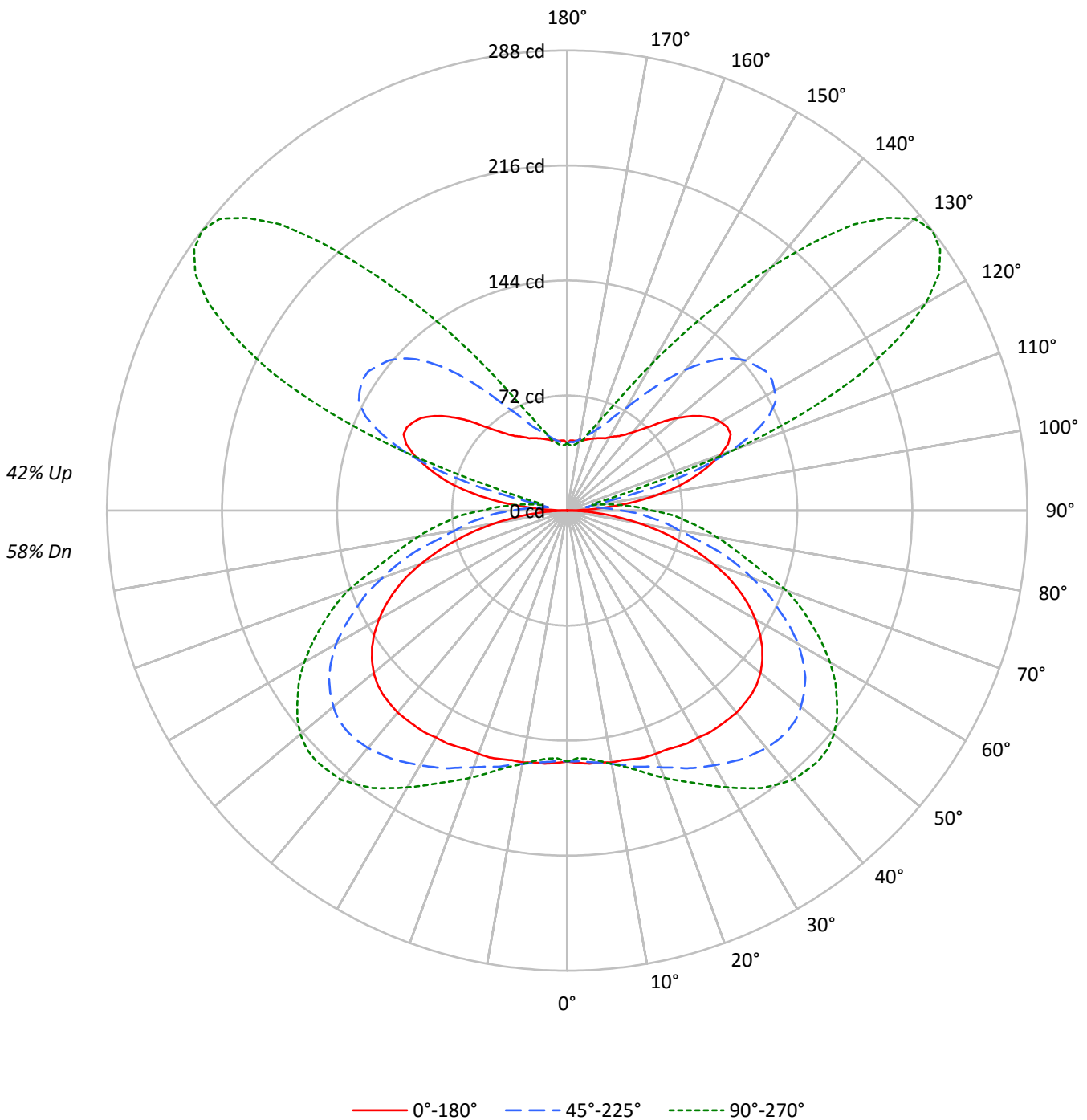
Lumens per Lamp: N/A
Luminaire Lumens: 1492.0 lumens
Efficiency: N/A
Efficacy: 85.3 lumens/watt
Spacing Criteria (0/90/45): 1.6 / 2 / 1.92
Luminous Opening: Rectangular (W 1.21' x L: 0.88' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 17.5
Input Voltage (V): 120.03
Input Current (Ain): 0.148
Voltage Rise (V): NR
Power Factor: 0.9846
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 HR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P24188
CATALOG NUMBER: S901DIP-1L35-D02XXU

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64	58
1	98	92	88	83	91	86	82	78	74	71	68	63	61	59	53	52	50	45
2	88	79	72	66	81	74	67	62	63	58	54	54	50	47	45	42	40	35
3	79	68	60	53	73	64	56	50	55	49	44	46	42	38	39	35	32	28
4	72	60	51	44	66	56	48	41	48	41	36	41	36	32	34	30	27	23
5	66	53	44	37	60	49	41	35	42	36	31	36	31	27	30	26	23	19
6	60	47	38	31	55	44	36	30	38	31	26	32	27	23	27	23	19	16
7	55	42	33	27	51	39	31	26	34	27	23	29	24	20	24	20	17	14
8	51	38	29	24	47	35	28	22	31	24	20	26	21	17	22	18	15	12
9	47	34	26	21	44	32	25	20	28	22	17	24	19	15	20	16	13	11
10	44	31	24	18	41	29	22	17	26	20	15	22	17	14	19	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1598	1598	1598
5°	1625	1615	1594
10°	1654	1664	1664
15°	1697	1750	1771
20°	1755	1853	1928
25°	1831	1999	2112
30°	1928	2163	2351
35°	2051	2361	2635
40°	2193	2578	2924
45°	2347	2808	3196
50°	2502	3025	3453
55°	2645	3230	3656
60°	2769	3400	3869
65°	2867	3517	4071
70°	2887	3661	4346
75°	2832	3855	4563
80°	2697	4163	5570
85°	2336	6191	8761



TEST NUMBER: P24188

CATALOG NUMBER: S901DIP-1L35-D02XXU

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.1	1.0
10°-20°	47.0	3.2
20°-30°	82.0	5.5
30°-40°	118.8	8.0
40°-50°	149.3	10.0
50°-60°	159.9	10.7
60°-70°	143.2	9.6
70°-80°	101.4	6.8
80°-90°	56.1	3.8
90°-100°	29.6	2.0
100°-110°	60.5	4.1
110°-120°	145.8	9.8
120°-130°	157.5	10.6
130°-140°	115.4	7.7
140°-150°	62.6	4.2
150°-160°	29.8	2.0
160°-170°	13.9	0.9
170°-180°	4.2	0.3
0°-30°	144.2	9.7
0°-40°	263.0	17.6
0°-60°	572.1	38.3
0°-90°	872.7	58.5
90°-120°	235.9	15.8
90°-150°	571.4	38.3
90°-180°	619.0	41.5
0°-180°	1492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	157	157	157	157	157	
5°	159	158	158	158	156	15
15°	161	162	166	168	168	46
25°	163	168	178	187	188	75
35°	165	172	190	207	212	104
45°	163	171	195	216	222	126
55°	149	156	182	202	206	133
65°	119	125	146	165	169	117
75°	72	80	98	110	116	76
85°	20	32	53	70	75	22
90°	0	21	34	48	53	3
95°	27	16	21	32	36	28
105°	83	70	56	23	17	87
115°	113	110	139	196	203	110
125°	103	114	152	250	285	92
135°	75	94	134	208	253	59
145°	57	67	93	129	148	36
155°	50	52	62	73	77	23
165°	46	46	49	50	50	13
175°	44	43	43	42	41	4
180°	42	42	42	42	42	



TEST NUMBER: P24188

CATALOG NUMBER: S901DIP-1L35-D02XXU

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	157	157	157	157	157	157	157	157	157	157	157
2.5°	158	157	158	157	157	158	157	157	157	157	157
5°	159	158	158	158	158	159	158	158	158	158	158
7.5°	159	158	159	159	159	159	159	159	159	159	159
10°	160	159	160	159	159	160	160	160	160	161	161
12.5°	160	159	160	160	160	162	161	162	162	163	164
15°	161	160	161	161	161	163	163	164	164	166	166
17.5°	162	161	162	162	163	164	165	166	167	168	170
20°	162	161	163	163	164	166	167	168	169	171	173
22.5°	162	162	163	163	165	167	168	170	172	174	176
25°	163	162	164	165	166	169	170	172	175	178	180
27.5°	164	163	165	166	167	170	172	175	178	181	184
30°	164	164	165	166	169	172	174	178	181	184	188
32.5°	165	164	166	167	170	173	176	180	183	187	191
35°	165	165	167	168	170	174	177	181	185	190	194
37.5°	165	165	167	168	171	175	178	182	187	192	197
40°	165	165	167	168	171	175	179	183	188	194	200
42.5°	164	164	166	167	170	175	178	183	189	195	201
45°	163	163	165	166	169	173	177	183	188	195	201
47.5°	161	161	163	164	167	171	175	181	187	194	200
50°	158	158	159	161	163	168	172	178	184	191	198
52.5°	154	153	155	156	159	163	168	174	180	187	193
55°	149	149	150	151	153	158	162	169	175	182	188
57.5°	143	143	144	145	147	152	156	162	168	175	181
60°	136	136	137	138	140	145	149	155	161	167	172
62.5°	128	128	129	129	132	136	141	146	151	157	162
65°	119	119	120	120	123	127	131	136	141	146	152
67.5°	109	108	110	110	113	117	121	125	130	136	141
70°	97	97	98	99	102	106	109	114	118	123	128
72.5°	85	85	87	88	91	94	97	101	106	111	116
75°	72	73	74	76	78	82	84	89	93	98	102
77.5°	59	59	61	63	65	69	72	75	79	82	86
80°	46	46	48	50	53	56	58	61	66	71	77
82.5°	32	33	35	37	40	42	46	51	57	63	67
85°	20	21	23	25	29	34	39	43	48	53	58
87.5°	9	10	13	18	24	29	32	36	40	45	50
90°	0	4	11	17	20	22	24	27	31	34	38
92.5°	10	11	14	17	18	18	19	21	24	27	31
95°	27	28	26	21	17	15	15	15	18	21	24
97.5°	43	44	41	34	26	17	12	11	13	15	18
100°	58	59	55	48	42	34	23	14	12	12	13
102.5°	72	73	69	63	58	52	47	39	28	19	16
105°	83	84	82	77	72	68	65	63	61	56	49
107.5°	93	95	94	89	85	81	81	81	84	86	88
110°	102	103	103	99	96	93	94	96	102	109	117



TEST NUMBER: P24188

CATALOG NUMBER: S901DIP-1L35-D02XXU

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	109	109	109	108	104	102	104	107	115	126	139
115°	113	112	113	113	111	109	112	116	125	139	155
117.5°	113	114	115	116	115	115	117	123	131	147	166
120°	111	114	113	116	116	118	120	128	136	150	171
122.5°	108	110	111	113	115	119	121	129	139	152	171
125°	103	104	106	110	112	117	122	129	138	152	171
127.5°	97	98	100	105	108	113	120	127	136	149	166
130°	90	91	93	98	103	109	116	125	134	146	161
132.5°	83	84	87	91	97	103	110	119	129	141	154
135°	75	77	80	84	90	97	104	113	122	134	146
137.5°	69	71	73	77	83	89	97	106	115	125	136
140°	64	65	67	71	75	81	88	97	105	115	125
142.5°	60	61	63	65	69	74	80	88	96	104	112
145°	57	58	60	62	65	69	73	80	86	93	101
147.5°	55	56	56	58	60	64	67	72	77	83	88
150°	53	53	54	55	57	59	62	66	70	74	79
152.5°	51	51	52	53	54	55	58	61	64	68	70
155°	50	50	50	52	52	53	55	57	60	62	64
157.5°	49	48	49	50	50	51	52	54	55	57	59
160°	48	47	48	48	49	49	50	51	53	54	54
162.5°	47	46	47	47	48	48	48	50	50	51	52
165°	46	46	46	47	46	47	47	47	48	49	48
167.5°	45	45	45	46	46	45	46	46	46	47	47
170°	45	45	45	45	45	45	45	45	45	45	45
172.5°	44	45	44	44	44	44	44	44	44	44	44
175°	44	44	44	43	43	43	44	44	43	43	43
177.5°	44	44	44	44	43	43	43	43	43	43	42
180°	42	42	42	42	42	42	42	42	42	42	42



TEST NUMBER: P24188

CATALOG NUMBER: S901DIP-1L35-D02XXU

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	157	157	157	157	157	157	157	157
2.5°	157	156	157	157	157	156	156	155
5°	158	157	157	158	157	156	157	156
7.5°	159	159	159	160	160	158	159	158
10°	161	161	162	162	162	162	162	161
12.5°	164	164	165	165	165	165	165	164
15°	167	167	168	169	169	168	169	168
17.5°	170	171	172	173	173	173	173	173
20°	174	175	177	178	178	178	178	178
22.5°	178	179	181	182	183	183	183	183
25°	182	184	186	188	188	188	189	188
27.5°	186	188	191	193	194	194	195	194
30°	190	193	196	198	199	200	201	200
32.5°	194	197	201	203	205	205	207	206
35°	198	202	206	208	211	211	212	212
37.5°	201	205	210	213	215	215	217	216
40°	204	208	213	216	218	219	220	220
42.5°	206	210	214	218	220	221	222	221
45°	206	210	215	218	220	221	222	222
47.5°	205	210	214	217	219	220	221	221
50°	203	207	211	215	217	217	218	218
52.5°	199	203	207	210	212	213	213	213
55°	193	197	201	204	206	206	207	206
57.5°	186	189	193	196	198	199	199	199
60°	177	181	185	187	189	190	190	190
62.5°	167	171	175	177	179	180	181	180
65°	156	160	164	166	168	169	170	169
67.5°	145	148	152	155	157	158	158	158
70°	132	136	140	142	145	145	145	146
72.5°	120	123	126	127	128	128	129	129
75°	104	106	109	112	114	115	116	116
77.5°	91	95	99	101	103	104	105	105
80°	81	85	88	91	93	95	95	95
82.5°	71	75	79	81	83	85	85	85
85°	62	66	69	71	74	75	75	75
87.5°	53	57	60	62	64	65	66	66
90°	42	45	47	50	52	52	53	53
92.5°	34	37	39	41	43	44	45	45
95°	27	29	31	34	35	36	36	36
97.5°	20	22	24	26	28	28	29	29
100°	15	16	18	20	21	21	22	22
102.5°	14	14	14	15	16	16	16	16
105°	38	30	25	21	20	18	17	17
107.5°	88	82	73	65	59	53	51	49
110°	124	125	126	122	120	115	114	112



TEST NUMBER: P24188

CATALOG NUMBER: S901DIP-1L35-D02XXU

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	151	158	163	165	164	164	164	162
115°	171	184	194	199	200	202	204	203
117.5°	187	203	216	223	230	232	235	234
120°	194	214	231	244	250	256	259	259
122.5°	196	219	241	255	265	271	276	276
125°	195	219	241	260	271	281	286	285
127.5°	189	213	237	257	272	281	288	288
130°	182	204	227	249	264	276	284	284
132.5°	172	193	215	234	252	264	271	271
135°	162	178	198	217	232	244	252	253
137.5°	150	164	179	195	209	220	226	227
140°	137	148	161	174	185	193	199	199
142.5°	123	133	143	153	162	168	172	172
145°	109	117	125	133	140	144	149	148
147.5°	96	101	108	115	120	123	126	125
150°	84	89	94	98	102	104	107	106
152.5°	75	78	81	84	87	88	90	90
155°	67	69	72	74	75	76	78	77
157.5°	61	62	64	65	67	67	68	67
160°	56	57	58	59	60	60	61	60
162.5°	52	53	54	54	55	55	55	54
165°	50	49	50	50	50	50	51	50
167.5°	47	47	47	46	46	46	45	45
170°	45	45	45	45	45	45	44	44
172.5°	44	44	44	44	43	43	43	42
175°	43	42	42	42	42	42	41	41
177.5°	42	42	42	42	41	41	41	41
180°	42	42	42	42	42	42	42	42

(END OF REPORT)