

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: P24187

Luminaire Tested: **S901DIP-1L35-D02XXD**

Issue Date: 3/3/2020

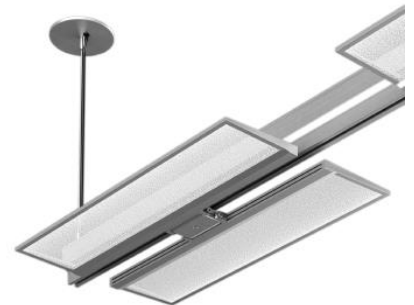
Test Information

Test Method: LM-79-08
Report Number: P24187
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S901DIP-1L35-D02XXD
Description: NEORAY INDEX SUSPENDED WITH 1 FOOT WING YOKE (DOWN)
Light Source: (84) 3500K LEDS
Ballast/Driver: (1) ADVANCE ELECTRONIC DRIVERS
LEDINTA2000C24DO

Summary

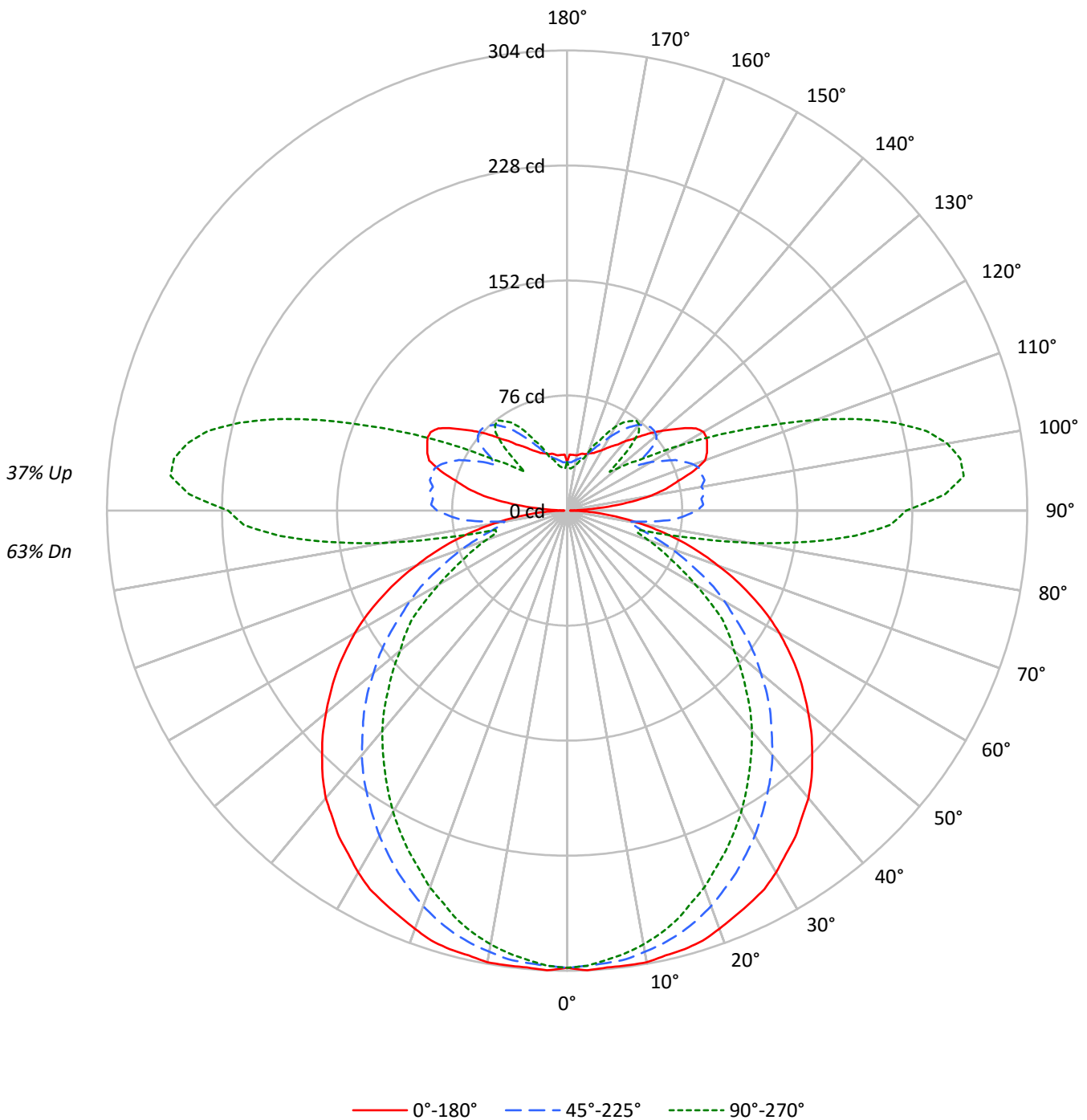
Lumens per Lamp: N/A
Luminaire Lumens: 1467.9 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.14 / 1.33
Luminous Opening: Rectangular (W 1.21' x L: 0.88' x H: 0')
CIE Type: Semi-Direct

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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	0
RCR																					
0	110	110	110	110	103	103	103	103	91	91	91	79	79	79	68	68	68	63			
1	99	93	88	84	92	87	83	79	76	73	70	66	64	61	57	55	53	49			
2	89	81	74	68	83	76	70	64	66	61	57	58	54	50	49	47	44	40			
3	81	71	63	56	76	67	59	53	58	53	48	51	46	42	44	40	37	34			
4	74	63	54	48	69	59	51	45	52	46	41	45	40	36	39	35	32	29			
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28	25			
6	63	50	41	35	59	47	39	34	42	35	31	37	31	27	32	28	24	22			
7	58	45	37	31	54	43	35	30	38	32	27	33	28	24	29	25	22	19			
8	54	41	33	27	51	39	31	26	35	28	24	31	25	22	27	22	19	17			
9	50	38	30	24	47	36	28	23	32	26	21	28	23	19	25	21	17	15			
10	47	35	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16	14			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3097	3066	3045
10°	3132	3060	3008
15°	3162	3046	2951
20°	3185	3012	2871
25°	3213	2966	2786
30°	3245	2915	2704
35°	3269	2859	2610
40°	3296	2804	2525
45°	3297	2736	2404
50°	3294	2645	2281
55°	3301	2556	2219
60°	3299	2443	1995
65°	3252	2313	1807
70°	3155	2173	1697
75°	3068	2045	1927
80°	2873	2462	7211
85°	2570	8177	22311



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.5	1.9
10°-20°	81.5	5.6
20°-30°	122.2	8.3
30°-40°	145.9	9.9
40°-50°	149.5	10.2
50°-60°	133.1	9.1
60°-70°	99.7	6.8
70°-80°	67.2	4.6
80°-90°	96.0	6.5
90°-100°	127.8	8.7
100°-110°	125.3	8.5
110°-120°	95.4	6.5
120°-130°	65.3	4.4
130°-140°	54.4	3.7
140°-150°	40.2	2.7
150°-160°	22.2	1.5
160°-170°	10.6	0.7
170°-180°	3.2	0.2
0°-30°	232.2	15.8
0°-40°	378.1	25.8
0°-60°	660.8	45.0
0°-90°	923.7	62.9
90°-120°	348.5	23.7
90°-150°	508.3	34.6
90°-180°	544.0	37.1
0°-180°	1467.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	303	302	300	298	298	29
15°	300	296	289	282	280	85
25°	286	278	264	252	248	132
35°	263	251	230	215	210	164
45°	229	214	190	174	167	177
55°	186	170	144	129	125	166
65°	135	120	96	80	75	133
75°	78	68	52	47	49	82
85°	22	28	70	153	191	24
90°	2	32	86	184	224	3
95°	24	42	89	204	263	26
105°	76	70	92	165	224	81
115°	102	90	79	106	125	101
125°	95	90	62	55	58	85
135°	70	76	78	71	58	55
145°	52	56	66	72	72	33
155°	42	44	47	51	51	20
165°	39	38	36	36	35	11
175°	37	36	32	30	28	4
180°	32	32	32	32	32	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	302	302	302	302	302	302	302	302	302	302	302
2.5°	304	305	304	303	302	303	302	302	301	301	300
5°	303	305	304	303	302	303	302	301	300	300	299
7.5°	303	304	304	302	301	302	300	299	299	299	297
10°	303	303	302	301	300	300	299	298	296	296	295
12.5°	301	302	301	300	298	298	297	295	294	293	291
15°	300	301	300	298	296	297	294	292	291	289	287
17.5°	298	298	297	295	293	293	289	288	286	284	281
20°	294	295	294	291	289	289	285	282	280	278	275
22.5°	290	291	289	287	284	283	280	276	274	271	267
25°	286	287	285	282	279	278	274	271	267	264	260
27.5°	282	282	280	277	274	272	267	264	260	256	252
30°	276	276	275	271	267	265	260	256	252	248	244
32.5°	269	270	268	264	260	258	252	248	243	239	235
35°	263	263	261	257	252	250	243	239	235	230	226
37.5°	255	256	253	249	244	241	235	230	225	221	216
40°	248	248	246	241	236	232	225	221	216	211	206
42.5°	239	239	236	232	226	222	216	211	206	200	196
45°	229	230	226	222	216	212	206	200	195	190	185
47.5°	219	219	216	211	206	202	195	189	184	179	174
50°	208	208	205	200	195	190	183	178	173	167	162
52.5°	197	197	194	189	183	179	172	167	161	156	151
55°	186	185	182	177	172	167	161	155	149	144	138
57.5°	174	173	170	165	160	155	149	143	137	131	127
60°	162	161	158	153	148	143	137	130	125	120	116
62.5°	149	147	145	140	135	130	124	118	113	109	104
65°	135	134	131	127	122	118	111	106	101	96	91
67.5°	121	120	118	113	110	105	99	94	89	84	80
70°	106	106	104	100	96	92	86	82	77	73	69
72.5°	92	91	89	87	83	79	74	70	66	62	60
75°	78	77	75	73	70	66	63	59	55	52	51
77.5°	63	62	62	60	57	55	52	49	47	45	44
80°	49	48	48	47	45	43	41	40	40	42	48
82.5°	35	35	35	34	34	34	35	38	45	55	69
85°	22	22	23	24	25	31	37	46	55	70	87
87.5°	11	11	13	19	27	34	44	52	64	78	98
90°	2	5	13	20	27	36	46	55	70	86	106
92.5°	7	10	16	24	33	42	49	61	72	90	110
95°	24	24	25	31	38	45	55	63	76	89	109
97.5°	40	41	41	41	43	51	58	67	77	92	109
100°	56	55	53	52	55	57	62	70	79	90	105
102.5°	67	67	64	65	63	63	68	73	81	93	105
105°	76	79	77	72	69	70	70	77	84	92	103
107.5°	88	89	84	80	76	72	75	77	83	92	101
110°	97	95	91	89	81	75	73	77	83	89	97



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	100	101	99	93	89	76	74	74	78	84	90
115°	102	105	102	97	93	86	70	71	74	79	83
117.5°	104	105	103	100	95	90	81	66	67	71	74
120°	104	102	103	98	97	91	85	73	61	64	65
122.5°	101	99	99	97	94	91	87	81	67	56	57
125°	95	95	94	94	92	88	85	82	76	62	49
127.5°	88	90	89	89	89	87	85	82	79	74	64
130°	82	83	83	84	84	84	82	81	79	77	73
132.5°	76	76	77	79	81	81	80	81	80	78	76
135°	70	70	71	72	75	76	76	77	78	78	77
137.5°	64	65	65	67	69	72	73	75	75	76	77
140°	60	60	61	62	65	67	69	71	72	74	74
142.5°	55	56	56	58	60	62	64	67	68	70	72
145°	52	52	52	53	55	57	59	61	63	66	67
147.5°	49	49	49	50	52	53	54	57	58	61	62
150°	46	47	47	47	48	49	51	52	54	56	57
152.5°	44	45	45	45	46	47	47	48	49	51	52
155°	42	43	43	43	44	44	44	45	46	47	48
157.5°	41	42	41	42	42	42	42	43	43	43	44
160°	40	41	40	41	40	41	40	41	40	40	40
162.5°	39	40	39	39	39	39	39	39	38	38	38
165°	39	39	39	38	38	38	37	37	37	36	36
167.5°	38	38	38	38	38	37	37	36	36	35	35
170°	37	37	37	37	37	36	36	35	35	34	33
172.5°	37	37	37	37	37	36	35	34	34	33	32
175°	37	37	37	36	36	35	34	34	33	32	32
177.5°	37	37	36	36	35	35	34	33	33	32	31
180°	32	32	32	32	32	32	32	32	32	32	32



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	302	302	302	302	302	302	302	302
2.5°	299	301	300	300	300	300	300	301
5°	298	299	298	298	298	297	297	298
7.5°	295	296	295	295	295	294	294	295
10°	293	294	292	292	292	290	291	291
12.5°	289	290	287	287	286	285	285	286
15°	284	285	282	281	281	279	279	280
17.5°	278	278	275	274	273	272	272	272
20°	272	271	268	267	266	265	264	265
22.5°	264	263	260	259	258	256	256	256
25°	256	256	253	251	250	248	248	248
27.5°	249	247	244	242	241	239	239	239
30°	240	239	235	233	232	230	229	230
32.5°	231	229	226	224	222	221	220	220
35°	221	220	216	214	213	211	210	210
37.5°	212	210	207	204	203	201	200	200
40°	201	200	196	194	192	191	190	190
42.5°	191	189	186	184	182	180	179	179
45°	180	178	175	172	170	169	167	167
47.5°	169	167	163	161	159	157	156	156
50°	157	155	152	148	147	145	144	144
52.5°	146	143	140	138	137	136	135	135
55°	134	132	130	128	127	126	125	125
57.5°	123	121	119	117	114	113	111	111
60°	113	110	107	103	102	99	98	98
62.5°	100	97	94	91	89	88	86	86
65°	87	85	81	80	78	77	76	75
67.5°	76	74	71	69	69	67	66	66
70°	66	64	62	60	60	58	57	57
72.5°	57	55	53	52	51	50	49	49
75°	48	48	47	47	48	48	49	49
77.5°	45	48	54	62	71	76	81	82
80°	60	75	88	99	111	117	121	123
82.5°	86	104	120	134	145	153	158	159
85°	106	127	146	160	172	181	188	191
87.5°	121	145	164	181	197	205	211	214
90°	129	152	174	194	206	218	223	224
92.5°	135	162	189	209	228	239	247	250
95°	134	162	191	217	236	252	260	263
97.5°	131	157	187	211	234	250	259	262
100°	126	150	179	204	225	242	253	255
102.5°	122	142	167	192	213	230	240	243
105°	117	134	155	175	195	211	221	224
107.5°	113	125	142	160	176	188	198	201
110°	106	117	129	142	154	165	172	175



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	97	106	116	125	134	142	147	148
115°	90	95	102	109	116	120	124	125
117.5°	79	84	88	93	98	101	104	104
120°	68	72	76	79	82	84	85	86
122.5°	60	61	64	66	68	69	70	70
125°	51	53	54	56	57	58	59	58
127.5°	47	46	47	48	49	50	50	51
130°	66	52	44	42	43	43	43	43
132.5°	74	69	63	52	46	41	39	38
135°	75	74	72	70	66	62	60	58
137.5°	77	76	76	75	73	72	71	70
140°	75	76	76	76	76	75	75	74
142.5°	72	74	75	75	76	75	75	75
145°	69	70	72	73	73	73	73	72
147.5°	64	66	67	68	69	69	69	69
150°	58	61	62	63	64	64	64	64
152.5°	53	55	56	57	58	58	58	58
155°	48	49	51	51	52	52	52	51
157.5°	44	45	46	46	46	46	47	47
160°	41	41	41	42	42	41	41	41
162.5°	38	38	38	38	38	37	36	36
165°	36	36	36	35	35	35	35	35
167.5°	34	34	33	33	33	33	32	32
170°	33	32	32	32	31	31	31	30
172.5°	32	31	31	31	30	30	30	29
175°	31	31	30	30	30	29	29	28
177.5°	30	30	30	29	29	28	28	28
180°	32	32	32	32	32	32	32	32

(END OF REPORT)