

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P1057299

Luminaire Tested: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

Issue Date: 8/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057299
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2504-407-3, G2-2504-407-5)
Test Lab: INNOVATION CENTER
Issue Date: 8/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK
Description: PrentaLux 2-INCH CYLINDER
DOWNLIGHT 1000 LUMENS, SPOT OPTIC (19-DEGREES)
UPLIGHT 1000 LUMENS, NARROW FLOOD OPTIC (27-DEGREES)
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

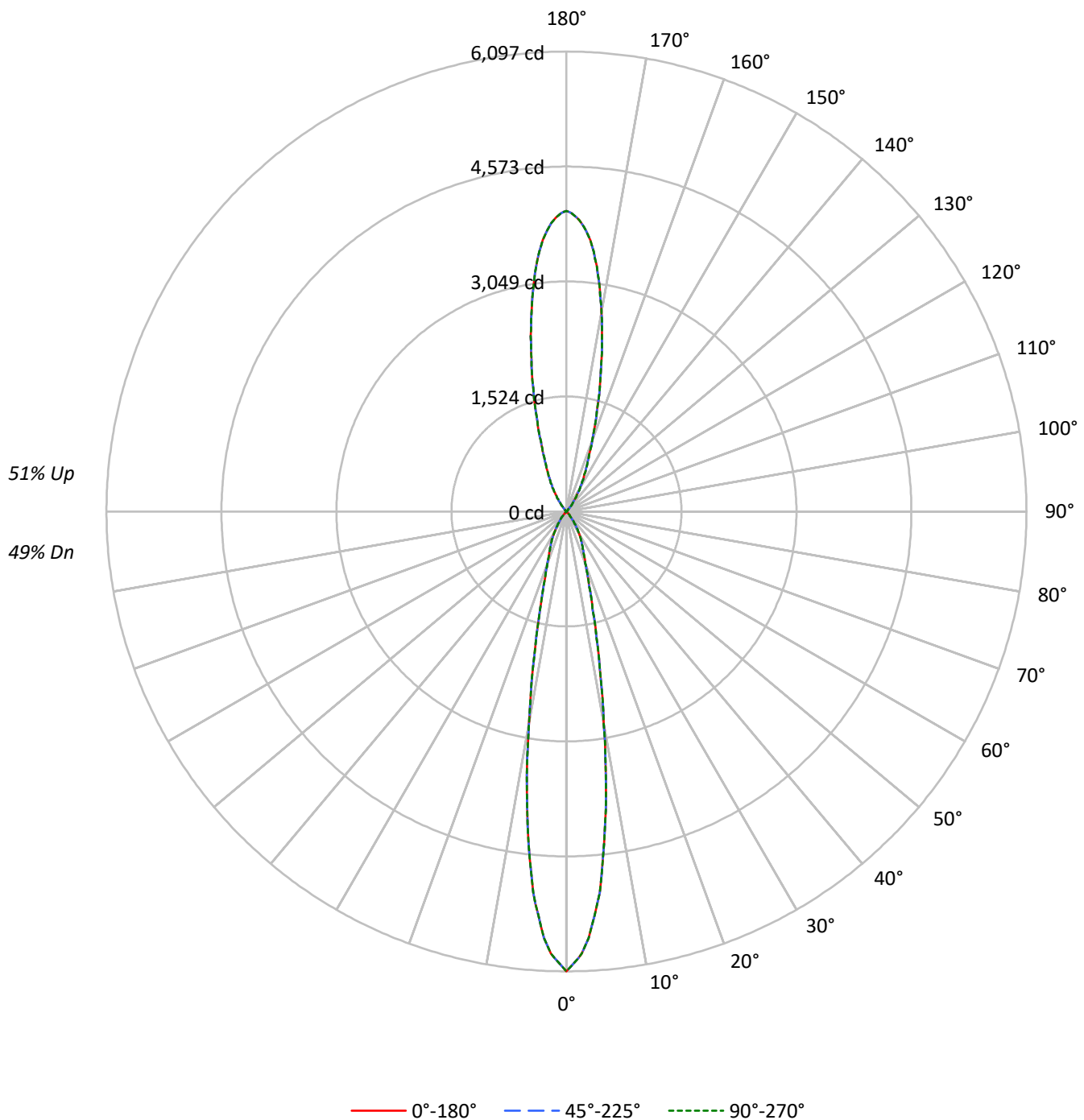
Lumens per Lamp: N/A
Luminaire Lumens: 2374.9 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.33 / 0.34
Luminous Opening: Circular (Dia: 0.15' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (Ain): 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: 24 FT

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

Luminous Intensity Polar Plot



TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55
1	100	97	94	92	93	90	88	86	77	75	74	65	64	63	53	53	52
2	94	89	85	81	87	83	79	76	72	69	67	61	59	58	51	50	50
3	89	82	77	73	83	77	72	69	67	64	61	58	56	54	49	48	47
4	84	76	70	66	78	72	67	63	63	60	57	55	53	51	48	46	45
5	79	71	65	61	74	67	62	58	59	56	53	52	50	48	46	44	43
6	75	66	60	56	70	63	58	54	56	53	50	50	47	45	44	43	41
7	72	62	57	52	67	59	54	51	53	50	47	48	45	43	43	41	40
8	68	59	53	49	64	56	51	48	51	47	44	46	43	41	41	40	38
9	65	56	50	47	61	53	49	45	49	45	42	44	42	40	40	38	37
10	62	53	48	44	59	51	46	43	47	43	41	43	40	38	39	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3929220	3929220	3929220
5°	3279882	3279882	3279882
10°	1870360	1870360	1870360
15°	895252	895252	895252
20°	501166	501166	501166
25°	351111	351111	351111
30°	243325	243325	243325
35°	127759	127759	127759
40°	47109	47109	47109
45°	14035	14035	14035
50°	6617	6617	6617
55°	4943	4943	4943
60°	4253	4253	4253
65°	3355	3355	3355
70°	2073	2073	2073
75°	0	0	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14035 cd/sqm

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	408.3	17.2
10°-20°	397.6	16.7
20°-30°	228.8	9.6
30°-40°	105.5	4.4
40°-50°	16.0	0.7
50°-60°	3.8	0.2
60°-70°	1.9	0.1
70°-80°	0.4	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.8	0.0
110°-120°	2.6	0.1
120°-130°	5.5	0.2
130°-140°	20.7	0.9
140°-150°	117.3	4.9
150°-160°	281.4	11.8
160°-170°	470.7	19.8
170°-180°	313.6	13.2
0°-30°	1034.7	43.6
0°-40°	1140.2	48.0
0°-60°	1160.0	48.8
0°-90°	1162.4	48.9
90°-120°	3.3	0.1
90°-150°	146.8	6.2
90°-180°	1213.0	51.1
0°-180°	2374.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6097	6097	6097	6097	6097	
5°	5070	5070	5070	5070	5070	408
15°	1342	1342	1342	1342	1342	398
25°	494	494	494	494	494	229
35°	162	162	162	162	162	106
45°	15	15	15	15	15	16
55°	4	4	4	4	4	4
65°	2	2	2	2	2	2
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	1	1	1	1	1	1
115°	2	2	2	2	2	3
125°	6	6	6	6	6	5
135°	21	21	21	21	21	21
145°	179	179	179	179	179	117
155°	597	597	597	597	597	281
165°	1704	1704	1704	1704	1704	471
175°	3608	3608	3608	3608	3608	314
180°	3983	3983	3983	3983	3983	

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6097.3	6097.3	6097.3	6097.3	6097.3
1°	5981.9	5981.9	5981.9	5981.9	5981.9
2°	5866.4	5866.4	5866.4	5866.4	5866.4
3°	5661.0	5661.0	5661.0	5661.0	5661.0
4°	5365.7	5365.7	5365.7	5365.7	5365.7
5°	5070.3	5070.3	5070.3	5070.3	5070.3
6°	4638.9	4638.9	4638.9	4638.9	4638.9
7°	4207.4	4207.4	4207.4	4207.4	4207.4
8°	3765.0	3765.0	3765.0	3765.0	3765.0
9°	3311.7	3311.7	3311.7	3311.7	3311.7
10°	2858.3	2858.3	2858.3	2858.3	2858.3
11°	2496.6	2496.6	2496.6	2496.6	2496.6
12°	2135.0	2135.0	2135.0	2135.0	2135.0
13°	1831.7	1831.7	1831.7	1831.7	1831.7
14°	1586.8	1586.8	1586.8	1586.8	1586.8
15°	1341.9	1341.9	1341.9	1341.9	1341.9
16°	1188.3	1188.3	1188.3	1188.3	1188.3
17°	1034.7	1034.7	1034.7	1034.7	1034.7
18°	912.5	912.5	912.5	912.5	912.5
19°	821.6	821.6	821.6	821.6	821.6
20°	730.8	730.8	730.8	730.8	730.8
21°	675.0	675.0	675.0	675.0	675.0
22°	619.3	619.3	619.3	619.3	619.3
23°	571.9	571.9	571.9	571.9	571.9
24°	532.8	532.8	532.8	532.8	532.8
25°	493.8	493.8	493.8	493.8	493.8
26°	460.4	460.4	460.4	460.4	460.4
27°	427.0	427.0	427.0	427.0	427.0
28°	393.7	393.7	393.7	393.7	393.7
29°	360.3	360.3	360.3	360.3	360.3
30°	327.0	327.0	327.0	327.0	327.0
31°	292.3	292.3	292.3	292.3	292.3
32°	257.6	257.6	257.6	257.6	257.6
33°	224.7	224.7	224.7	224.7	224.7
34°	193.6	193.6	193.6	193.6	193.6
35°	162.4	162.4	162.4	162.4	162.4
36°	137.4	137.4	137.4	137.4	137.4
37°	112.4	112.4	112.4	112.4	112.4
38°	91.1	91.1	91.1	91.1	91.1
39°	73.5	73.5	73.5	73.5	73.5
40°	56.0	56.0	56.0	56.0	56.0
41°	45.4	45.4	45.4	45.4	45.4
42°	34.9	34.9	34.9	34.9	34.9
43°	26.8	26.8	26.8	26.8	26.8
44°	21.1	21.1	21.1	21.1	21.1

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	15.4	15.4	15.4	15.4	15.4
46°	12.7	12.7	12.7	12.7	12.7
47°	10.1	10.1	10.1	10.1	10.1
48°	8.3	8.3	8.3	8.3	8.3
49°	7.5	7.5	7.5	7.5	7.5
50°	6.6	6.6	6.6	6.6	6.6
51°	5.7	5.7	5.7	5.7	5.7
52°	4.8	4.8	4.8	4.8	4.8
53°	4.4	4.4	4.4	4.4	4.4
54°	4.4	4.4	4.4	4.4	4.4
55°	4.4	4.4	4.4	4.4	4.4
56°	4.0	4.0	4.0	4.0	4.0
57°	3.5	3.5	3.5	3.5	3.5
58°	3.3	3.3	3.3	3.3	3.3
59°	3.3	3.3	3.3	3.3	3.3
60°	3.3	3.3	3.3	3.3	3.3
61°	2.9	2.9	2.9	2.9	2.9
62°	2.4	2.4	2.4	2.4	2.4
63°	2.2	2.2	2.2	2.2	2.2
64°	2.2	2.2	2.2	2.2	2.2
65°	2.2	2.2	2.2	2.2	2.2
66°	1.8	1.8	1.8	1.8	1.8
67°	1.3	1.3	1.3	1.3	1.3
68°	1.1	1.1	1.1	1.1	1.1
69°	1.1	1.1	1.1	1.1	1.1
70°	1.1	1.1	1.1	1.1	1.1
71°	1.1	1.1	1.1	1.1	1.1
72°	1.1	1.1	1.1	1.1	1.1
73°	0.9	0.9	0.9	0.9	0.9
74°	0.4	0.4	0.4	0.4	0.4
75°	0.0	0.0	0.0	0.0	0.0
76°	0.0	0.0	0.0	0.0	0.0
77°	0.0	0.0	0.0	0.0	0.0
78°	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0
89°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0
103°	0.2	0.2	0.2	0.2	0.2
104°	0.7	0.7	0.7	0.7	0.7
105°	1.1	1.1	1.1	1.1	1.1
106°	1.1	1.1	1.1	1.1	1.1
107°	1.1	1.1	1.1	1.1	1.1
108°	1.1	1.1	1.1	1.1	1.1
109°	1.1	1.1	1.1	1.1	1.1
110°	1.1	1.1	1.1	1.1	1.1
111°	1.5	1.5	1.5	1.5	1.5
112°	2.0	2.0	2.0	2.0	2.0
113°	2.2	2.2	2.2	2.2	2.2
114°	2.2	2.2	2.2	2.2	2.2
115°	2.2	2.2	2.2	2.2	2.2
116°	2.6	2.6	2.6	2.6	2.6
117°	3.1	3.1	3.1	3.1	3.1
118°	3.5	3.5	3.5	3.5	3.5
119°	4.0	4.0	4.0	4.0	4.0
120°	4.4	4.4	4.4	4.4	4.4
121°	4.4	4.4	4.4	4.4	4.4
122°	4.4	4.4	4.4	4.4	4.4
123°	4.6	4.6	4.6	4.6	4.6
124°	5.0	5.0	5.0	5.0	5.0
125°	5.5	5.5	5.5	5.5	5.5
126°	6.4	6.4	6.4	6.4	6.4
127°	7.2	7.2	7.2	7.2	7.2
128°	8.1	8.1	8.1	8.1	8.1
129°	9.0	9.0	9.0	9.0	9.0
130°	9.9	9.9	9.9	9.9	9.9
131°	11.2	11.2	11.2	11.2	11.2
132°	12.5	12.5	12.5	12.5	12.5
133°	14.7	14.7	14.7	14.7	14.7
134°	17.8	17.8	17.8	17.8	17.8

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	20.8	20.8	20.8	20.8	20.8
136°	27.4	27.4	27.4	27.4	27.4
137°	34.0	34.0	34.0	34.0	34.0
138°	43.2	43.2	43.2	43.2	43.2
139°	55.1	55.1	55.1	55.1	55.1
140°	66.9	66.9	66.9	66.9	66.9
141°	85.4	85.4	85.4	85.4	85.4
142°	103.8	103.8	103.8	103.8	103.8
143°	126.2	126.2	126.2	126.2	126.2
144°	152.5	152.5	152.5	152.5	152.5
145°	178.9	178.9	178.9	178.9	178.9
146°	213.1	213.1	213.1	213.1	213.1
147°	247.3	247.3	247.3	247.3	247.3
148°	284.0	284.0	284.0	284.0	284.0
149°	323.0	323.0	323.0	323.0	323.0
150°	362.1	362.1	362.1	362.1	362.1
151°	405.5	405.5	405.5	405.5	405.5
152°	449.0	449.0	449.0	449.0	449.0
153°	496.0	496.0	496.0	496.0	496.0
154°	546.4	546.4	546.4	546.4	546.4
155°	596.9	596.9	596.9	596.9	596.9
156°	662.3	662.3	662.3	662.3	662.3
157°	727.7	727.7	727.7	727.7	727.7
158°	806.9	806.9	806.9	806.9	806.9
159°	900.0	900.0	900.0	900.0	900.0
160°	993.0	993.0	993.0	993.0	993.0
161°	1118.5	1118.5	1118.5	1118.5	1118.5
162°	1244.1	1244.1	1244.1	1244.1	1244.1
163°	1386.3	1386.3	1386.3	1386.3	1386.3
164°	1545.2	1545.2	1545.2	1545.2	1545.2
165°	1704.0	1704.0	1704.0	1704.0	1704.0
166°	1881.8	1881.8	1881.8	1881.8	1881.8
167°	2069.4	2069.4	2069.4	2069.4	2069.4
168°	2265.8	2265.8	2265.8	2265.8	2265.8
169°	2465.5	2465.5	2465.5	2465.5	2465.5
170°	2675.1	2675.1	2675.1	2675.1	2675.1
171°	2881.4	2881.4	2881.4	2881.4	2881.4
172°	3086.6	3086.6	3086.6	3086.6	3086.6
173°	3280.8	3280.8	3280.8	3280.8	3280.8
174°	3458.6	3458.6	3458.6	3458.6	3458.6
175°	3607.8	3607.8	3607.8	3607.8	3607.8
176°	3732.9	3732.9	3732.9	3732.9	3732.9
177°	3828.3	3828.3	3828.3	3828.3	3828.3
178°	3901.9	3901.9	3901.9	3901.9	3901.9
179°	3957.8	3957.8	3957.8	3957.8	3957.8



TEST NUMBER: P1057299
CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	3983.1	3983.1	3983.1	3983.1	3983.1

TEST NUMBER: P1057299

CATALOG NUMBER: PRLX-CYL2W-DI-X-930-20L-SP-NF-U-S-X-X-BLAK

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.02	0.40	1.01	2.31	0.00	0.02	0.40	1.01	2.31
	3H	0.00	0.39	0.85	1.39	2.72	0.00	0.39	0.85	1.39	2.72
	4H	0.00	0.30	0.81	1.30	2.64	0.00	0.30	0.81	1.30	2.64
	6H	0.00	0.14	0.70	1.15	2.49	0.00	0.14	0.70	1.15	2.49
	8H	0.00	0.05	0.64	1.07	2.41	0.00	0.05	0.64	1.07	2.41
	12H	0.00	0.00	0.58	0.98	2.34	0.00	0.00	0.58	0.98	2.34
4H	2H	0.00	0.23	0.75	1.24	2.57	0.00	0.23	0.75	1.24	2.57
	3H	0.33	0.77	1.38	1.80	3.15	0.33	0.77	1.38	1.80	3.15
	4H	0.26	0.66	1.31	1.68	3.05	0.26	0.66	1.31	1.68	3.05
	6H	0.14	0.49	1.20	1.53	2.90	0.14	0.49	1.20	1.53	2.90
	8H	0.08	0.40	1.13	1.43	2.81	0.08	0.40	1.13	1.43	2.81
	12H	0.00	0.29	1.07	1.34	2.72	0.00	0.29	1.07	1.34	2.72
8H	4H	0.14	0.46	1.19	1.49	2.87	0.14	0.46	1.19	1.49	2.87
	6H	0.02	0.27	1.09	1.36	2.73	0.02	0.27	1.09	1.36	2.73
	8H	0.00	0.18	1.04	1.25	2.64	0.00	0.18	1.04	1.25	2.64
	12H	0.00	0.08	0.97	1.14	2.58	0.00	0.08	0.97	1.14	2.58
12H	4H	0.06	0.35	1.13	1.40	2.78	0.06	0.35	1.13	1.40	2.78
	6H	0.00	0.18	1.04	1.25	2.64	0.00	0.18	1.04	1.25	2.64
	8H	0.00	0.08	0.97	1.14	2.58	0.00	0.08	0.97	1.14	2.58

END OF REPORT