

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: LUMARK

Report Number: P144263

Luminaire Tested: **LDRL-5XQ-F05-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144263  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33699)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5XQ-F05-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (35) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10771.9 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Luminous Opening: Rectangular (W 0.83' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G3

Input Watts (W): 133.3  
Input Voltage (V): NR  
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: 25 FT

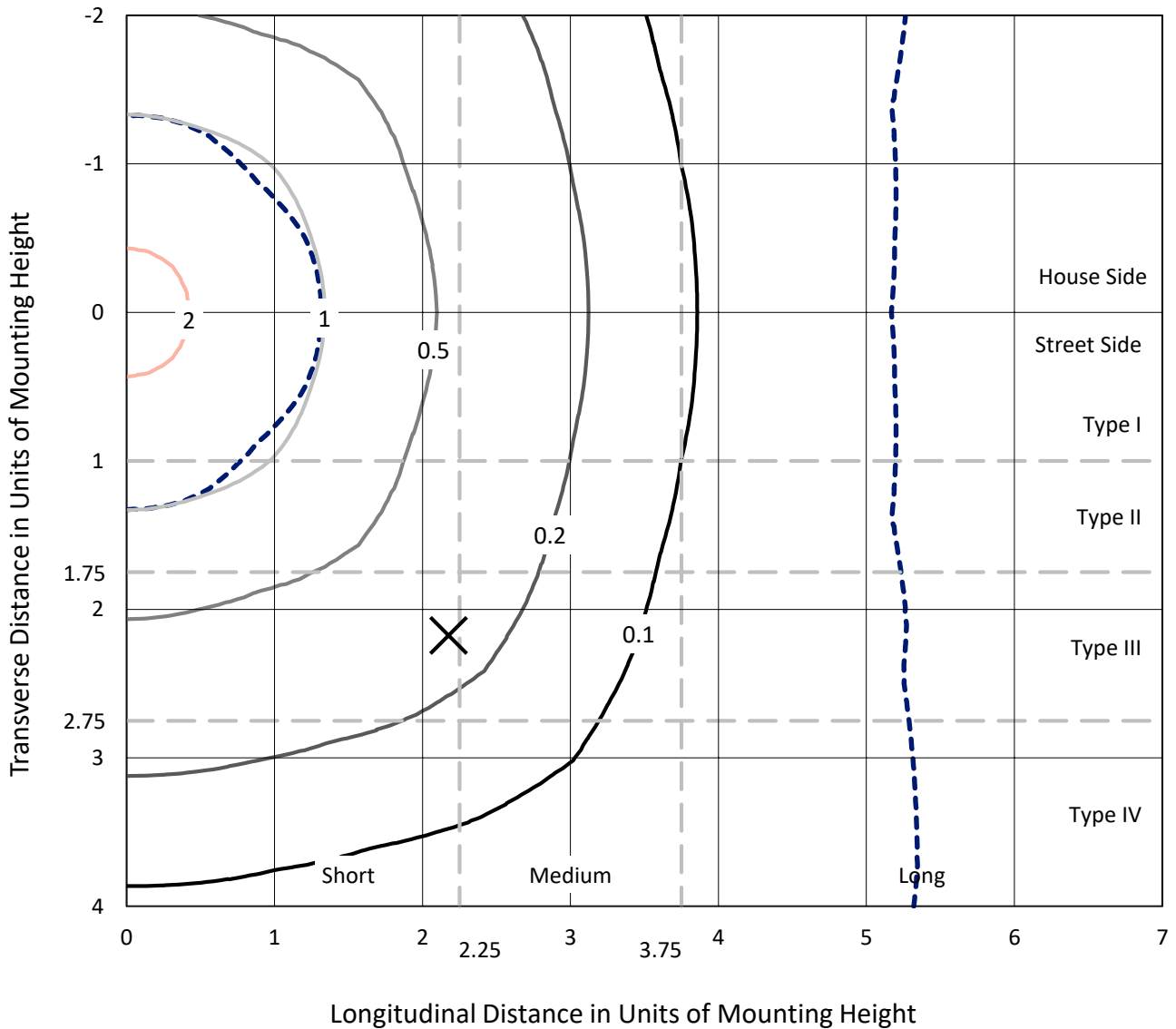


REPORT NUMBER: P144263

CATALOG NUMBER: LDRL-5XQ-F05-E-8030

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

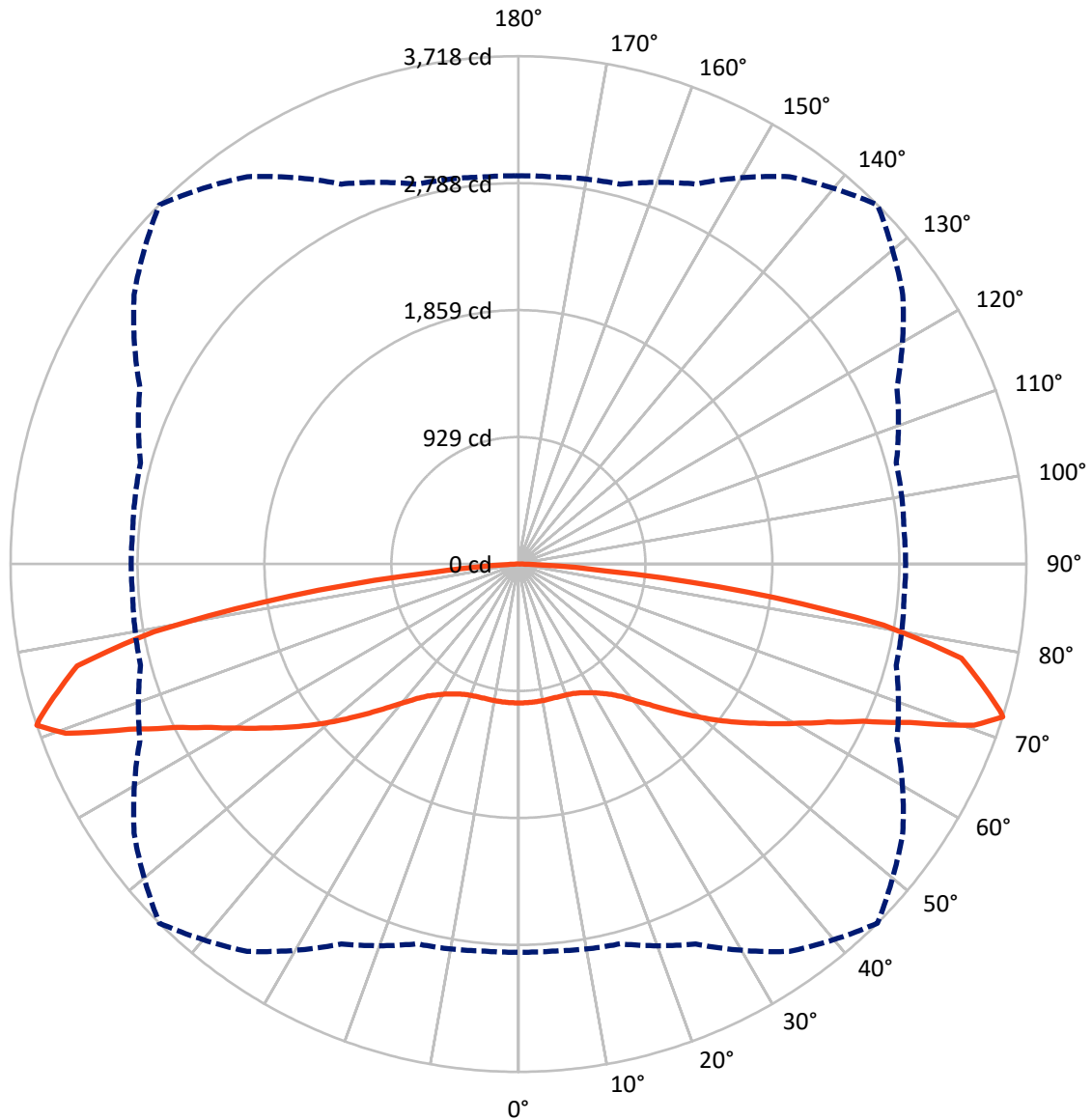


Based on 20 foot mounting height. Maximum calculated value = 2.5 fc  
 Type V - Short - Non-Cutoff

REPORT NUMBER: P144263

CATALOG NUMBER: LDRL-5XQ-F05-E-8030

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P144263

CATALOG NUMBER: LDRL-5XQ-F05-E-8030

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5386.0	0.0	5386.0
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	5386.0	0.0	5386.0
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	10771.9	0.0	10771.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.1	0.9
10°-20°	288.4	2.7
20°-30°	484.5	4.5
30°-40°	737.3	6.8
40°-50°	1165.6	10.8
50°-60°	1780.3	16.5
60°-70°	2608.2	24.2
70°-80°	2963.2	27.5
80°-90°	647.2	6.0
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°-90°	10771.9	100.0
0°-180°	10771.9	100.0



REPORT NUMBER: P144263

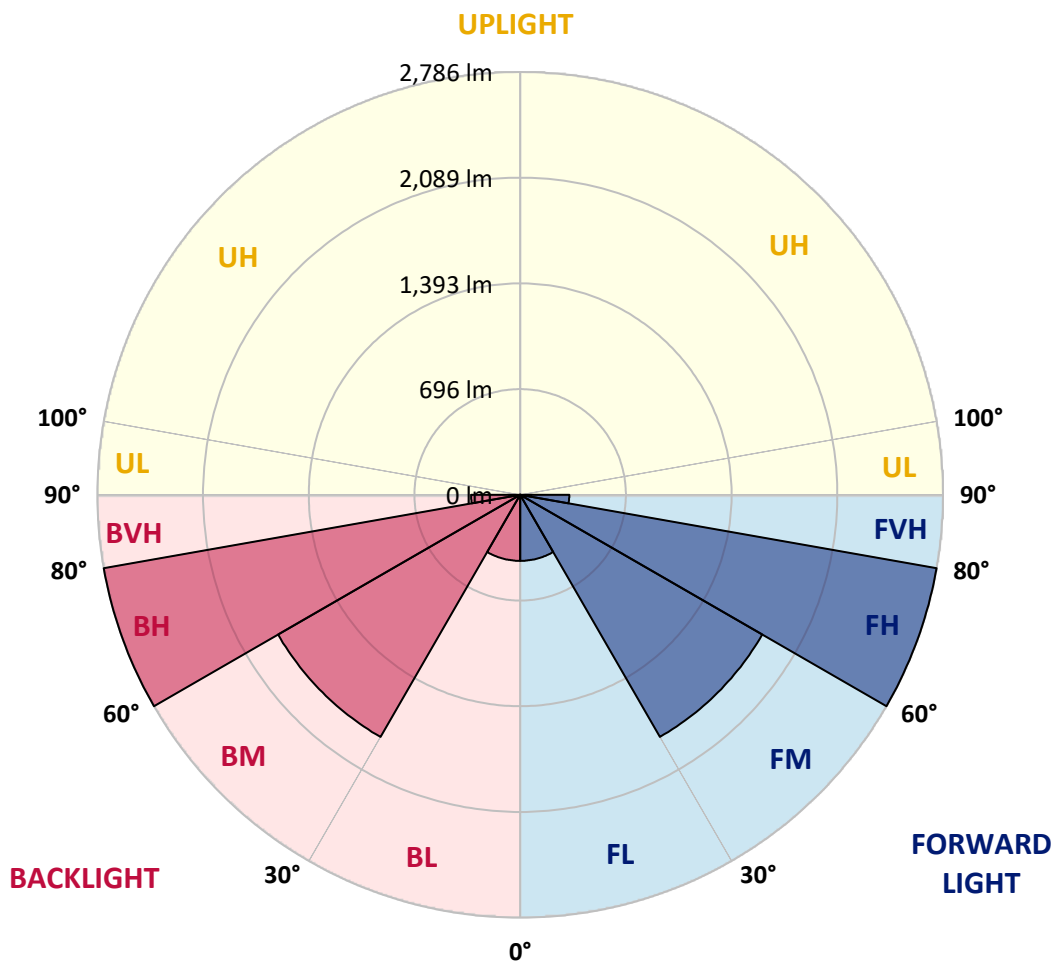
CATALOG NUMBER: LDRL-5XQ-F05-E-8030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	435.0	4.0			
FM	(30°-60°)	1841.7	17.1			
FH	(60°-80°)	2785.7	25.9			G2/5000
FVH	(80°-90°)	323.6	3.0			G3/500
BL	(0°-30°)	435.0	4.0	B1/500		
BM	(30°-60°)	1841.7	17.1	B2/2500		
BH	(60°-80°)	2785.7	25.9	B4/5000		G2/5000
BVH	(80°-90°)	323.6	3.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G3**

Type V Short





REPORT NUMBER: P144263

CATALOG NUMBER: LDRL-5XQ-F05-E-8030

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2
2.5°	1019.4	1019.0	1018.3	1017.6	1017.2	1016.9	1016.9	1016.9	1016.7	1016.6	1016.7
5°	1019.4	1019.0	1018.5	1018.0	1017.4	1016.9	1016.9	1016.9	1016.7	1016.6	1016.9
7.5°	1018.0	1018.3	1017.8	1017.2	1017.1	1016.9	1016.7	1016.6	1016.2	1015.8	1016.0
10°	1018.3	1019.7	1018.6	1017.6	1017.2	1016.9	1016.2	1015.5	1015.3	1015.2	1014.8
12.5°	1019.0	1020.4	1019.2	1018.0	1017.4	1016.9	1016.2	1015.5	1015.0	1014.4	1013.9
15°	1021.1	1022.1	1021.1	1020.0	1019.0	1018.0	1017.3	1016.6	1015.5	1014.4	1013.9
17.5°	1022.4	1024.2	1023.0	1021.8	1020.6	1019.4	1018.6	1018.0	1017.2	1016.6	1015.7
20°	1024.9	1026.6	1025.6	1024.6	1023.8	1023.2	1022.6	1022.2	1021.6	1021.1	1019.9
22.5°	1029.4	1030.8	1030.4	1030.1	1030.3	1030.4	1030.6	1030.8	1030.4	1030.1	1028.9
25°	1038.8	1038.8	1039.6	1040.2	1041.3	1042.3	1043.2	1044.0	1044.6	1045.1	1043.6
27.5°	1055.2	1056.6	1057.1	1057.6	1059.4	1061.1	1063.0	1064.9	1066.0	1067.0	1065.5
30°	1076.5	1076.5	1077.7	1078.8	1081.8	1084.8	1087.2	1089.7	1091.6	1093.6	1092.3
32.5°	1103.6	1105.4	1107.1	1108.8	1112.5	1116.2	1120.4	1124.5	1127.0	1129.4	1127.5
35°	1145.1	1147.2	1148.9	1150.6	1154.5	1158.3	1163.0	1167.7	1169.8	1171.9	1170.7
37.5°	1203.6	1203.6	1206.1	1208.5	1211.0	1213.4	1219.6	1225.9	1228.5	1231.2	1229.1
40°	1282.7	1283.0	1283.6	1284.1	1286.4	1288.6	1296.3	1303.9	1308.5	1313.0	1308.6
42.5°	1373.6	1377.4	1377.3	1377.1	1378.6	1380.2	1387.6	1394.9	1401.3	1407.8	1405.2
45°	1480.9	1480.2	1478.8	1477.4	1482.1	1486.9	1497.3	1507.7	1513.5	1519.2	1513.9
47.5°	1589.2	1588.2	1586.3	1584.4	1589.1	1593.8	1609.5	1625.2	1633.3	1641.5	1632.8
50°	1697.2	1701.4	1699.0	1696.6	1703.5	1710.4	1730.3	1750.2	1762.2	1774.2	1764.1
52.5°	1816.8	1819.9	1817.1	1814.3	1823.9	1833.4	1857.0	1880.5	1896.5	1912.6	1899.0
55°	1940.4	1936.6	1938.2	1939.7	1948.8	1957.8	1986.7	2015.6	2034.8	2054.0	2038.7
57.5°	2056.1	2057.4	2055.9	2054.3	2068.6	2082.9	2119.3	2155.7	2179.8	2203.8	2184.6
60°	2174.5	2174.8	2171.4	2167.9	2183.4	2198.9	2251.2	2303.4	2334.6	2365.8	2339.4
62.5°	2306.9	2306.6	2300.5	2294.4	2312.6	2330.9	2395.7	2460.5	2503.4	2546.2	2514.1
65°	2469.2	2465.0	2461.6	2458.1	2479.2	2500.2	2580.7	2661.2	2719.0	2776.8	2735.6
67.5°	2708.6	2705.4	2698.1	2690.8	2714.3	2737.8	2841.0	2944.0	3018.8	3093.5	3039.0
70°	2971.9	2966.0	2971.0	2976.1	3030.4	3084.8	3223.1	3361.4	3449.9	3538.4	3446.8
72°	2842.0	2844.4	2861.3	2878.2	2973.5	3068.8	3265.2	3461.7	3589.8	3717.8	3576.2
72.5°	2796.7	2798.8	2818.0	2837.2	2928.0	3019.0	3221.5	3424.1	3556.7	3689.2	3543.6
75°	2604.4	2610.0	2632.1	2654.2	2746.4	2838.5	3042.8	3247.1	3374.1	3501.1	3355.3
77.5°	2290.6	2308.0	2330.4	2352.9	2462.6	2572.4	2803.3	3034.3	3174.5	3314.7	3149.2
80°	1748.1	1741.8	1780.5	1819.2	1924.0	2028.9	2207.6	2386.4	2547.8	2709.2	2523.2
82.5°	679.3	694.3	774.4	854.6	964.4	1074.4	1234.4	1394.6	1540.0	1685.4	1530.6
85°	70.0	79.8	108.5	137.2	197.2	257.1	354.6	452.2	547.8	643.4	539.6
87.5°	28.2	31.0	39.9	48.8	51.0	53.3	64.4	75.6	75.1	74.6	73.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P144263

CATALOG NUMBER: LDRL-5XQ-F05-E-8030

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2	1017.2
2.5°	1016.9	1017.2	1017.6	1017.6	1017.6	1018.1	1018.6	1017.9
5°	1017.2	1017.4	1017.6	1017.6	1017.6	1018.1	1018.6	1017.9
7.5°	1016.2	1016.2	1016.2	1016.7	1017.2	1017.4	1017.6	1017.2
10°	1014.4	1014.6	1014.8	1015.3	1015.8	1016.4	1016.8	1017.2
12.5°	1013.4	1013.6	1013.8	1014.3	1014.8	1015.3	1015.8	1016.5
15°	1013.4	1013.6	1013.8	1014.1	1014.4	1015.1	1015.8	1016.5
17.5°	1014.8	1014.4	1014.1	1014.4	1014.8	1015.6	1016.5	1017.2
20°	1018.6	1018.1	1017.6	1017.6	1017.6	1018.4	1019.3	1019.3
22.5°	1027.6	1025.9	1024.2	1023.8	1023.5	1023.7	1023.8	1024.2
25°	1042.0	1039.2	1036.4	1035.5	1034.6	1034.3	1033.9	1034.7
27.5°	1063.9	1060.8	1057.6	1055.7	1053.8	1052.8	1051.8	1052.1
30°	1091.1	1087.4	1083.8	1080.6	1077.5	1076.1	1074.8	1075.1
32.5°	1125.6	1121.2	1116.8	1112.7	1108.5	1106.6	1104.6	1105.0
35°	1169.4	1164.4	1159.4	1155.9	1152.4	1149.4	1146.4	1148.9
37.5°	1227.0	1222.2	1217.6	1215.3	1213.0	1210.4	1207.8	1208.1
40°	1304.3	1299.4	1294.5	1292.6	1290.7	1287.4	1284.1	1284.8
42.5°	1402.6	1395.2	1387.9	1384.4	1381.0	1379.4	1377.8	1378.8
45°	1508.4	1501.1	1493.8	1490.8	1487.9	1483.7	1479.5	1483.3
47.5°	1624.1	1614.8	1605.6	1600.4	1595.1	1596.6	1597.9	1594.8
50°	1754.0	1738.6	1723.0	1717.0	1710.8	1710.8	1710.8	1710.5
52.5°	1885.4	1863.9	1842.5	1837.3	1832.0	1830.8	1829.6	1828.2
55°	2023.4	1997.0	1970.7	1961.0	1951.2	1952.6	1954.0	1957.8
57.5°	2165.4	2130.8	2096.1	2085.0	2073.8	2074.7	2075.6	2081.8
60°	2313.2	2268.4	2223.6	2211.3	2198.9	2202.2	2205.6	2209.3
62.5°	2482.1	2427.9	2373.8	2357.2	2340.7	2344.9	2349.0	2359.1
65°	2694.3	2626.7	2559.2	2541.9	2524.6	2526.6	2528.4	2545.9
67.5°	2984.4	2894.4	2804.4	2788.5	2772.6	2775.5	2778.2	2806.5
70°	3355.2	3221.7	3088.3	3022.6	2957.0	2946.7	2936.4	2951.4
72°	3434.6	3246.1	3057.6	2960.8	2864.0	2848.8	2833.6	2835.0
72.5°	3398.0	3207.4	3016.8	2922.8	2828.7	2816.4	2804.0	2801.6
75°	3209.6	3023.1	2836.8	2739.6	2642.4	2618.9	2595.4	2595.3
77.5°	2983.8	2748.8	2513.8	2409.0	2304.1	2279.5	2255.0	2235.8
80°	2337.2	2126.6	1916.0	1809.6	1703.2	1663.8	1624.4	1601.1
82.5°	1375.7	1182.0	988.3	853.2	718.0	677.4	636.8	580.4
85°	435.8	335.3	234.8	183.2	131.7	106.4	81.2	71.1
87.5°	72.4	58.9	45.3	43.7	42.2	33.1	24.0	20.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)