

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: P144238

Luminaire Tested: **LDRL-5XQ-E03-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144238  
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-E03-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (63) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7829.1 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B3 - U0 - G3

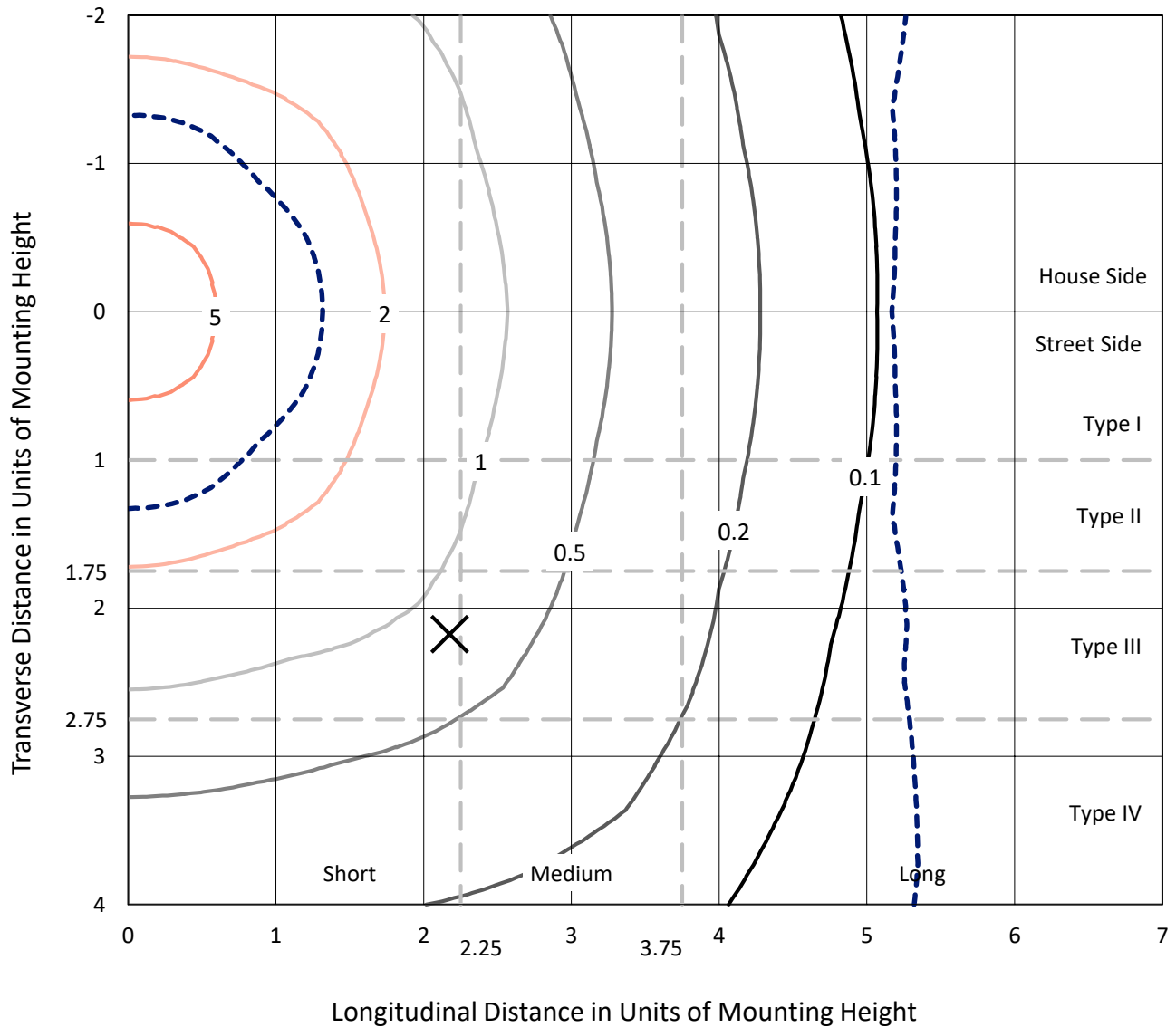
Input Watts (W): 75.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

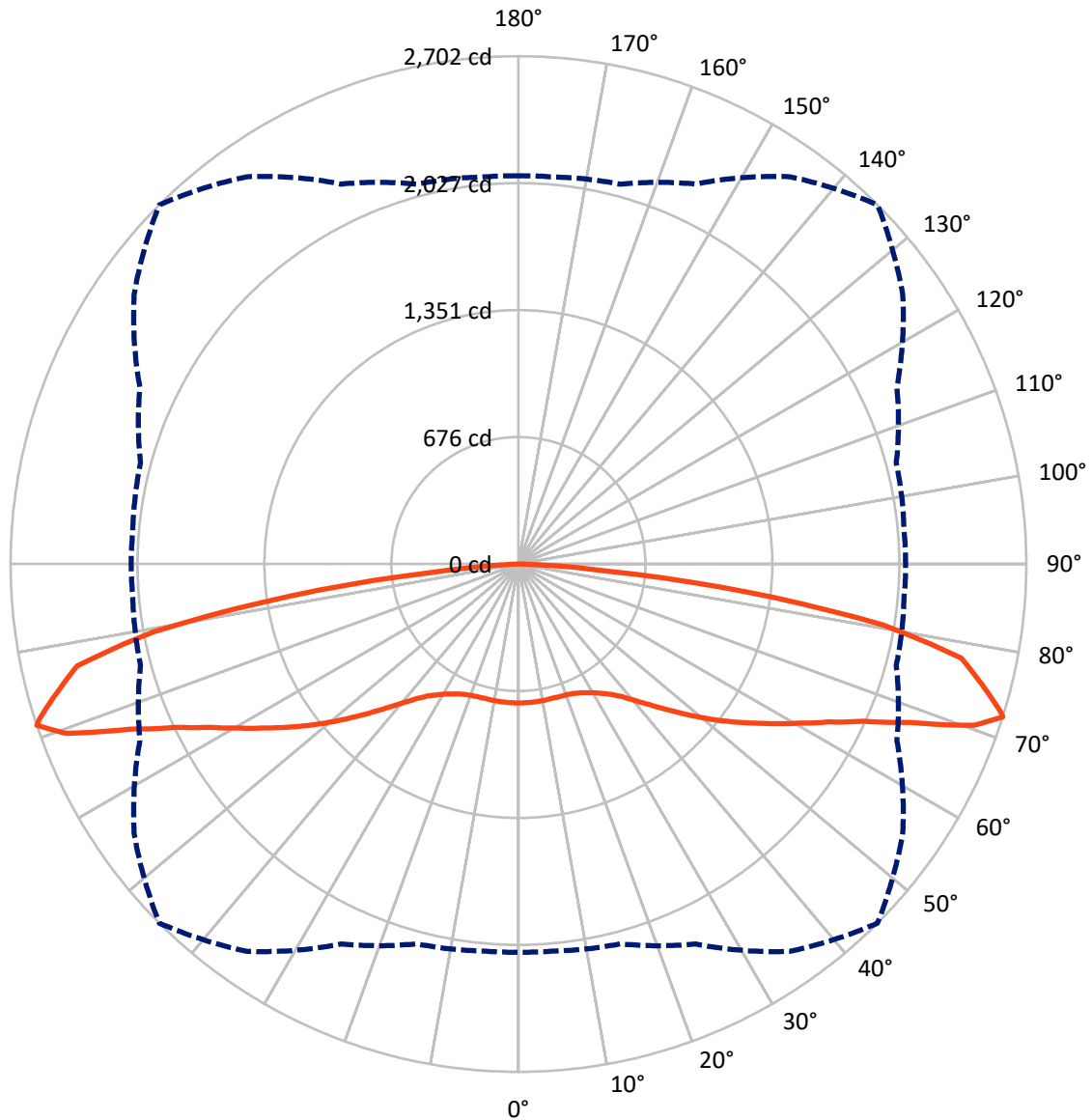


Based on 10 foot mounting height. Maximum calculated value = 7.4 fc  
 Type V - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3914.6	0.0	3914.6
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3914.6	0.0	3914.6
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	7829.1	0.0	7829.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	0.9
10°-20°	209.6	2.7
20°-30°	352.1	4.5
30°-40°	535.9	6.8
40°-50°	847.2	10.8
50°-60°	1294.0	16.5
60°-70°	1895.7	24.2
70°-80°	2153.6	27.5
80°-90°	470.4	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°	7829.1	100.0
0°-180°	7829.1	100.0



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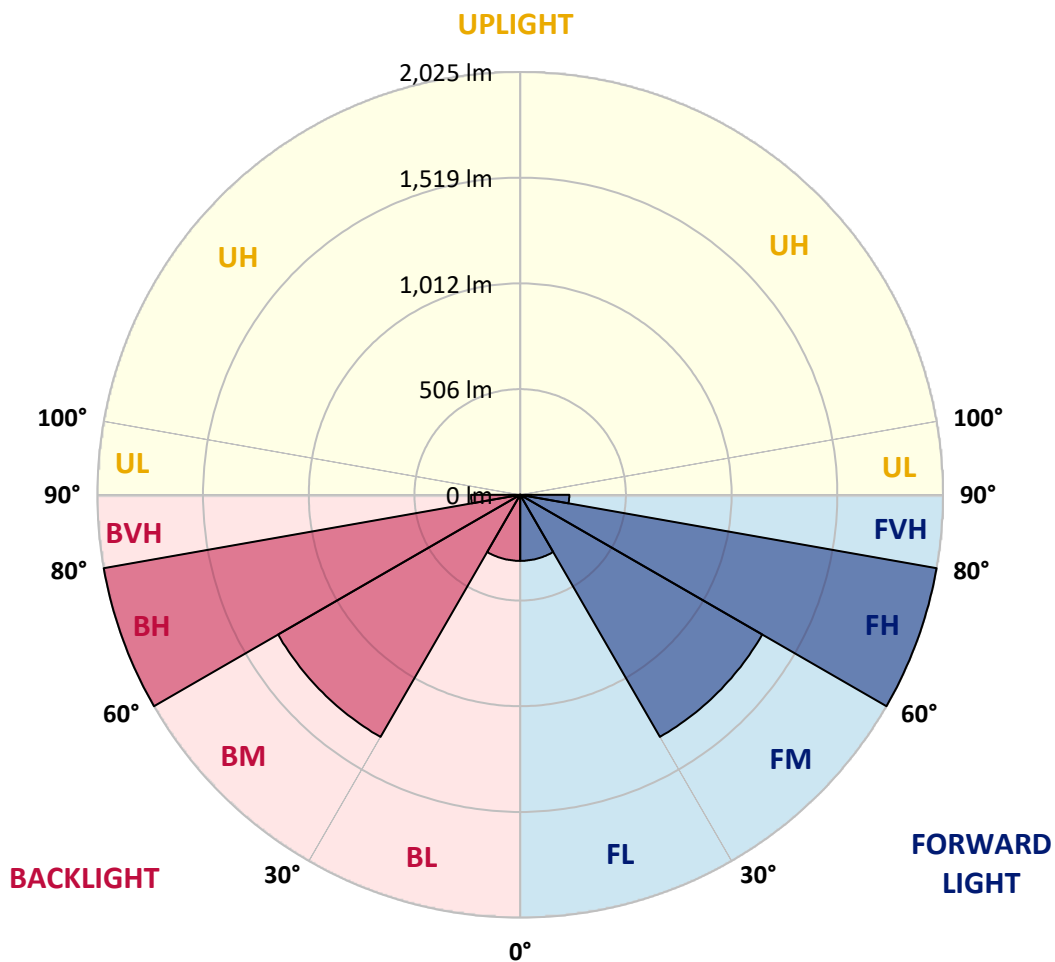
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	316.1	4.0			
FM	(30°-60°)	1338.5	17.1			
FH	(60°-80°)	2024.7	25.9			G2/5000
FVH	(80°-90°)	235.2	3.0			G3/500
BL	(0°-30°)	316.1	4.0	B1/500		
BM	(30°-60°)	1338.5	17.1	B2/2500		
BH	(60°-80°)	2024.7	25.9	B3/2500		G2/5000
BVH	(80°-90°)	235.2	3.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	740.8	740.6	740.1	739.6	739.4	739.1	739.1	739.1	739.0	738.8	739.0
5°	740.8	740.6	740.2	739.8	739.5	739.1	739.1	739.1	739.0	738.8	739.1
7.5°	739.8	740.1	739.7	739.4	739.2	739.1	739.0	738.8	738.6	738.4	738.5
10°	740.1	741.1	740.3	739.6	739.3	739.1	738.6	738.1	737.9	737.8	737.6
12.5°	740.6	741.6	740.7	739.8	739.4	739.1	738.6	738.1	737.7	737.3	736.9
15°	742.1	742.8	742.1	741.4	740.6	739.8	739.3	738.8	738.1	737.3	736.9
17.5°	743.2	744.4	743.5	742.6	741.8	740.8	740.4	739.8	739.3	738.8	738.2
20°	744.9	746.2	745.4	744.6	744.2	743.6	743.3	742.9	742.5	742.2	741.2
22.5°	748.2	749.2	748.9	748.7	748.8	748.9	749.1	749.2	748.9	748.7	747.8
25°	755.0	755.0	755.6	756.0	756.8	757.6	758.2	758.8	759.2	759.6	758.4
27.5°	767.0	768.0	768.3	768.7	770.0	771.2	772.6	774.0	774.8	775.6	774.4
30°	782.4	782.4	783.3	784.2	786.3	788.4	790.2	792.0	793.4	794.8	793.9
32.5°	802.2	803.4	804.7	806.0	808.6	811.2	814.3	817.3	819.1	820.8	819.5
35°	832.2	833.8	835.0	836.3	839.1	841.9	845.3	848.7	850.2	851.8	850.9
37.5°	874.8	874.8	876.6	878.4	880.1	881.8	886.4	891.0	892.9	894.8	893.3
40°	932.3	932.6	932.9	933.3	935.0	936.6	942.2	947.7	951.0	954.3	951.1
42.5°	998.4	1001.2	1001.0	1000.9	1002.0	1003.2	1008.5	1013.8	1018.5	1023.2	1021.3
45°	1076.4	1075.8	1074.8	1073.8	1077.2	1080.6	1088.2	1095.8	1100.0	1104.2	1100.3
47.5°	1155.0	1154.3	1152.9	1151.5	1154.9	1158.4	1169.8	1181.2	1187.1	1193.0	1186.7
50°	1233.6	1236.6	1234.8	1233.0	1238.1	1243.2	1257.6	1272.1	1280.8	1289.6	1282.2
52.5°	1320.4	1322.7	1320.7	1318.6	1325.6	1332.6	1349.7	1366.8	1378.4	1390.1	1380.2
55°	1410.4	1407.5	1408.6	1409.8	1416.4	1423.0	1444.0	1465.0	1478.9	1492.8	1481.7
57.5°	1494.4	1495.4	1494.2	1493.1	1503.5	1513.8	1540.3	1566.8	1584.2	1601.7	1587.8
60°	1580.4	1580.7	1578.2	1575.6	1586.9	1598.2	1636.2	1674.2	1696.8	1719.4	1700.4
62.5°	1676.7	1676.4	1672.0	1667.6	1680.8	1694.2	1741.2	1788.3	1819.5	1850.6	1827.4
65°	1794.6	1791.6	1789.1	1786.6	1801.9	1817.2	1875.7	1934.2	1976.2	2018.2	1988.2
67.5°	1968.6	1966.4	1961.0	1955.7	1972.8	1989.8	2064.8	2139.8	2194.1	2248.4	2208.8
70°	2160.0	2155.7	2159.4	2163.1	2202.6	2242.0	2342.6	2443.1	2507.4	2571.8	2505.1
72°	2065.6	2067.4	2079.6	2091.9	2161.2	2230.4	2373.2	2516.0	2609.1	2702.1	2599.2
72.5°	2032.6	2034.2	2048.1	2062.0	2128.1	2194.2	2341.4	2488.6	2585.0	2681.4	2575.5
75°	1892.9	1897.0	1913.0	1929.1	1996.1	2063.0	2211.6	2360.0	2452.3	2544.6	2438.7
77.5°	1664.8	1677.4	1693.8	1710.1	1789.8	1869.6	2037.5	2205.4	2307.2	2409.2	2288.9
80°	1270.6	1266.0	1294.1	1322.2	1398.4	1474.6	1604.5	1734.4	1851.8	1969.1	1833.9
82.5°	493.8	504.6	562.8	621.0	700.9	780.8	897.2	1013.6	1119.3	1225.0	1112.4
85°	50.9	58.0	78.9	99.8	143.3	186.8	257.8	328.6	398.2	467.6	392.2
87.5°	20.5	22.5	28.9	35.4	37.1	38.8	46.8	55.0	54.6	54.2	53.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3
2.5°	739.1	739.4	739.6	739.6	739.6	740.0	740.4	739.8
5°	739.4	739.5	739.6	739.6	739.6	740.0	740.4	739.8
7.5°	738.6	738.6	738.6	739.0	739.4	739.4	739.6	739.3
10°	737.4	737.5	737.6	737.9	738.3	738.7	739.0	739.3
12.5°	736.6	736.7	736.8	737.2	737.6	737.9	738.3	738.8
15°	736.6	736.7	736.8	737.0	737.3	737.8	738.3	738.8
17.5°	737.6	737.3	737.1	737.3	737.6	738.2	738.8	739.3
20°	740.4	740.0	739.6	739.6	739.6	740.2	740.8	740.9
22.5°	746.9	745.6	744.4	744.1	743.8	744.0	744.2	744.4
25°	757.3	755.3	753.2	752.6	752.0	751.8	751.5	752.0
27.5°	773.2	771.0	768.7	767.3	765.9	765.2	764.4	764.7
30°	793.0	790.3	787.6	785.4	783.1	782.1	781.1	781.4
32.5°	818.1	814.9	811.8	808.7	805.7	804.3	802.9	803.1
35°	850.0	846.3	842.6	840.1	837.6	835.4	833.2	835.0
37.5°	891.8	888.4	884.9	883.2	881.6	879.7	877.8	878.1
40°	948.0	944.4	940.9	939.5	938.1	935.7	933.3	933.8
42.5°	1019.4	1014.0	1008.7	1006.2	1003.6	1002.5	1001.4	1002.2
45°	1096.4	1091.0	1085.7	1083.6	1081.4	1078.4	1075.3	1078.1
47.5°	1180.4	1173.7	1167.0	1163.2	1159.4	1160.4	1161.4	1159.1
50°	1274.8	1263.6	1252.3	1247.9	1243.4	1243.4	1243.4	1243.2
52.5°	1370.3	1354.7	1339.2	1335.4	1331.6	1330.6	1329.8	1328.8
55°	1470.6	1451.5	1432.4	1425.2	1418.2	1419.2	1420.2	1423.0
57.5°	1573.9	1548.7	1523.5	1515.4	1507.3	1507.9	1508.6	1513.1
60°	1681.2	1648.7	1616.1	1607.2	1598.2	1600.6	1603.0	1605.8
62.5°	1804.0	1764.7	1725.3	1713.3	1701.2	1704.3	1707.3	1714.7
65°	1958.2	1909.1	1860.0	1847.4	1834.9	1836.3	1837.7	1850.4
67.5°	2169.2	2103.7	2038.2	2026.7	2015.2	2017.2	2019.2	2039.8
70°	2438.6	2341.6	2244.6	2196.9	2149.2	2141.7	2134.2	2145.1
72°	2496.3	2359.3	2222.3	2151.9	2081.6	2070.5	2059.5	2060.5
72.5°	2469.6	2331.2	2192.7	2124.4	2056.0	2047.0	2038.0	2036.2
75°	2332.8	2197.3	2061.8	1991.2	1920.5	1903.4	1886.3	1886.3
77.5°	2168.6	1997.8	1827.0	1750.8	1674.6	1656.8	1639.0	1625.0
80°	1698.7	1545.6	1392.6	1315.2	1237.9	1209.3	1180.6	1163.7
82.5°	999.8	859.1	718.3	620.1	521.8	492.4	462.8	421.8
85°	316.8	243.7	170.6	133.2	95.7	77.3	59.0	51.7
87.5°	52.6	42.8	32.9	31.8	30.6	24.0	17.4	14.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)