

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: P143671

Luminaire Tested: **LDRL-5MQ-E06-E-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P143671  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33697)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-5MQ-E06-E-7050  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (126) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19132.8 lumens  
Efficiency: N/A  
Efficacy: 127.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B4 - U0 - G2

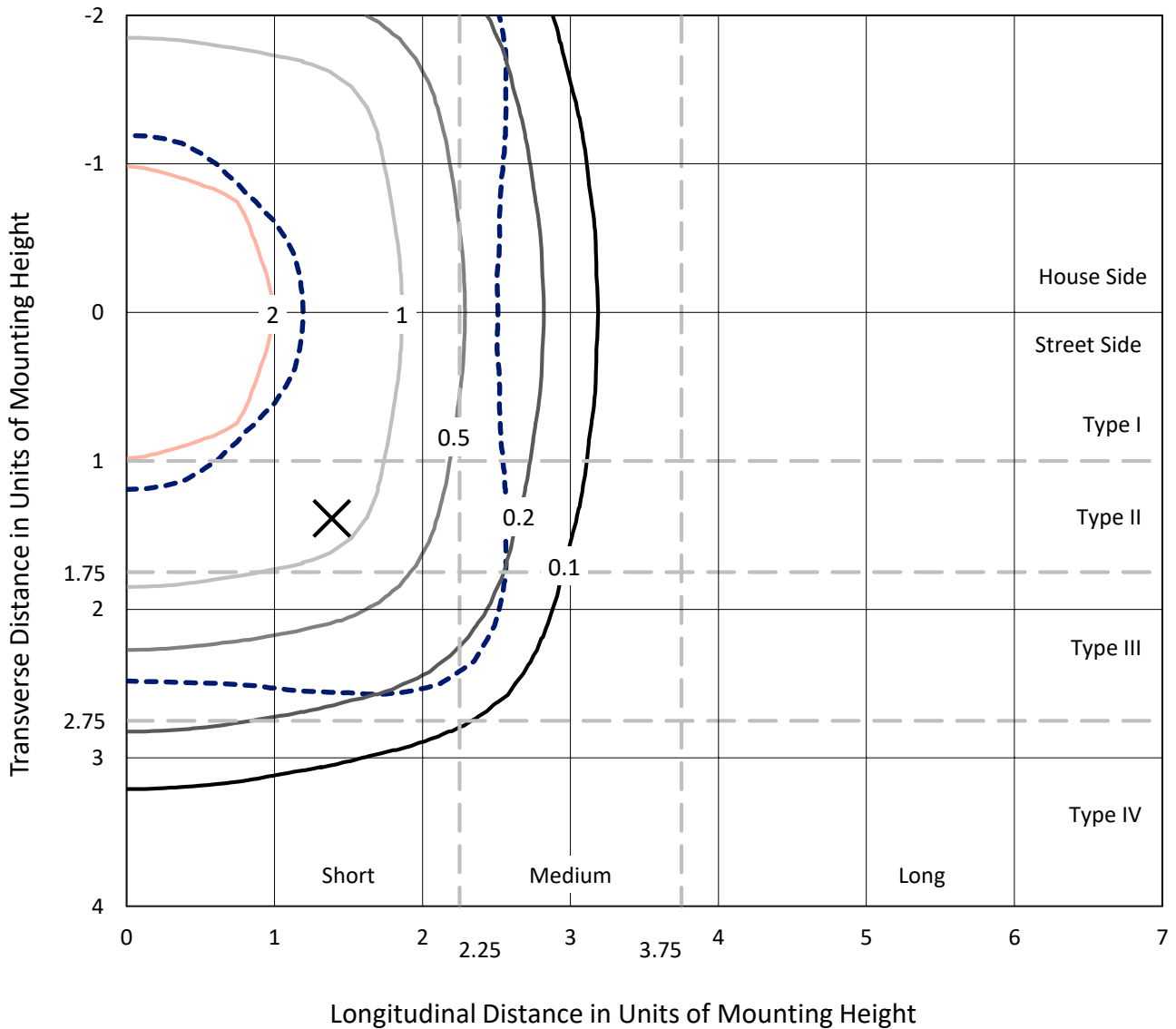
Input Watts (W): 150.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

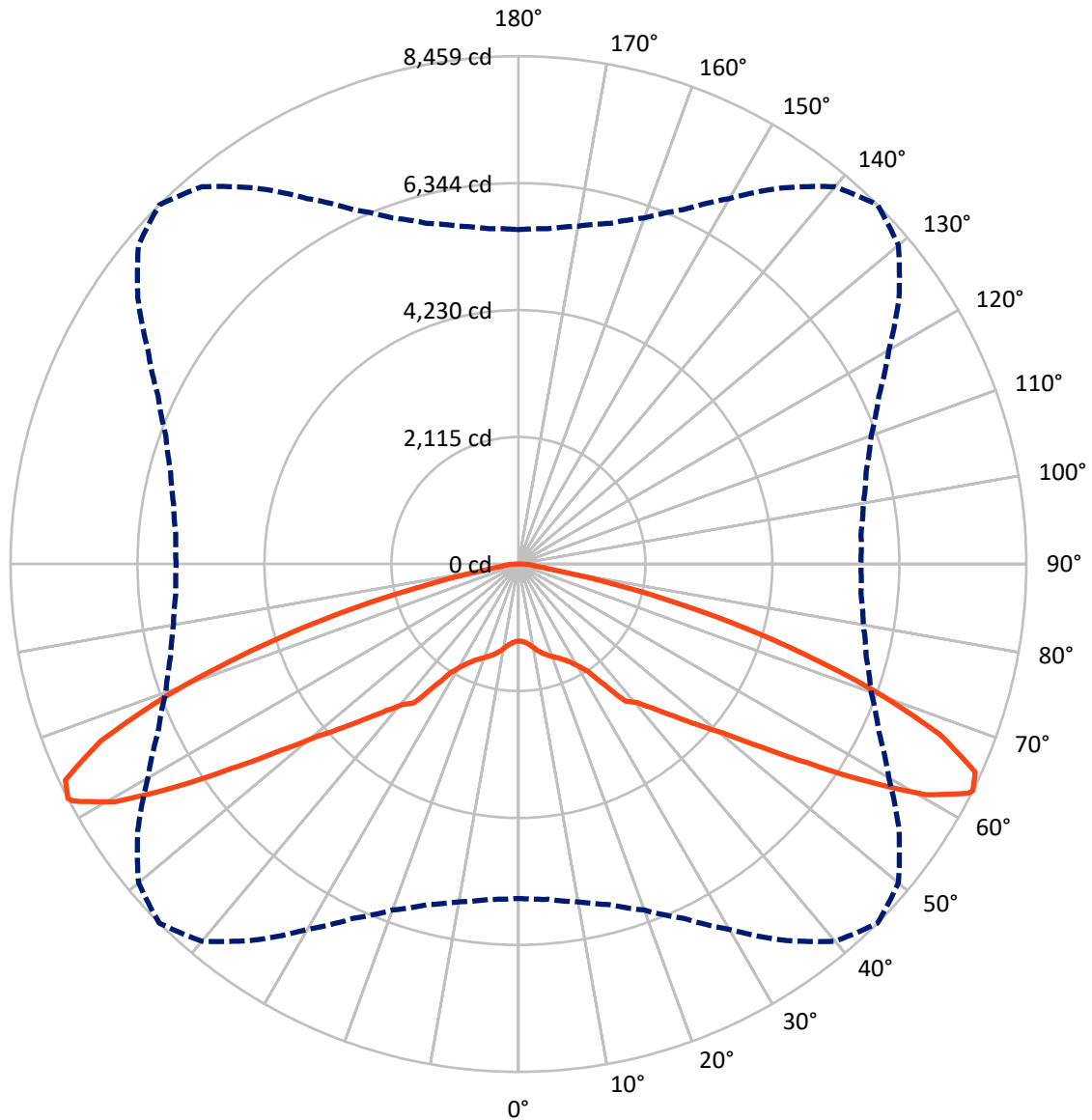
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 63-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9566.4	0.0	9566.4
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	9566.4	0.0	9566.4
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	19132.8	0.0	19132.8
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.3	0.7
10°-20°	441.7	2.3
20°-30°	843.7	4.4
30°-40°	1607.3	8.4
40°-50°	2767.7	14.5
50°-60°	4945.8	25.8
60°-70°	6024.1	31.5
70°-80°	2145.8	11.2
80°-90°	227.5	1.2
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°	19132.8	100.0
0°-180°	19132.8	100.0



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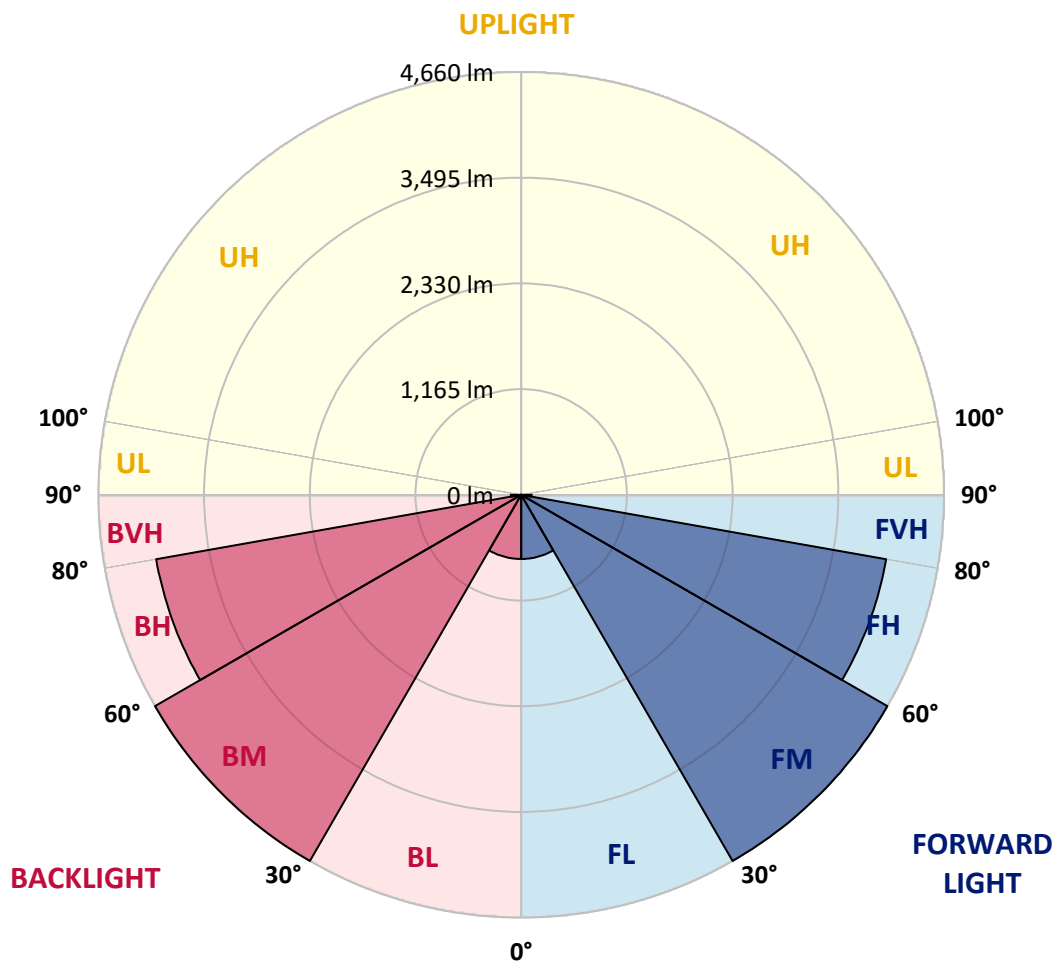
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	707.3	3.7			
FM	(30°-60°)	4660.4	24.4			
FH	(60°-80°)	4084.9	21.4			G2/5000
FVH	(80°-90°)	113.8	0.6			G2/225
BL	(0°-30°)	707.3	3.7	B2/1000		
BM	(30°-60°)	4660.4	24.4	B3/5000		
BH	(60°-80°)	4084.9	21.4	B4/5000		G2/5000
BVH	(80°-90°)	113.8	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3
2.5°	1294.1	1292.9	1294.1	1291.7	1291.7	1290.4	1290.4	1290.4	1288.0	1290.4	1288.0
5°	1321.2	1320.0	1321.2	1318.8	1318.8	1316.3	1316.3	1316.3	1313.8	1316.3	1315.1
7.5°	1368.0	1370.5	1368.0	1365.5	1365.5	1363.1	1361.8	1361.8	1360.6	1359.4	1361.8
10°	1433.3	1435.7	1432.0	1429.6	1428.3	1427.1	1424.6	1423.4	1423.4	1418.5	1419.7
12.5°	1502.2	1502.2	1498.5	1497.3	1497.3	1494.8	1489.9	1488.7	1488.7	1486.2	1483.7
15°	1563.8	1563.8	1561.3	1556.4	1557.6	1553.9	1550.2	1547.8	1547.8	1545.3	1542.9
17.5°	1620.4	1620.4	1616.7	1611.8	1609.3	1608.1	1603.2	1600.7	1600.7	1598.3	1595.8
20°	1677.1	1679.5	1673.4	1668.4	1663.5	1658.6	1653.7	1651.2	1647.5	1648.7	1647.5
22.5°	1744.8	1746.0	1736.2	1730.0	1720.2	1714.0	1706.6	1704.2	1699.2	1699.2	1701.7
25°	1831.0	1829.8	1818.7	1807.6	1796.5	1784.2	1773.1	1770.6	1765.7	1764.5	1765.7
27.5°	1944.3	1943.0	1929.5	1914.7	1899.9	1881.5	1867.9	1860.5	1856.8	1851.9	1854.4
30°	2083.4	2085.9	2069.9	2052.6	2034.2	2012.0	1994.7	1984.9	1977.5	1972.6	1975.0
32.5°	2366.6	2364.1	2339.5	2302.6	2263.2	2211.5	2169.6	2152.4	2138.8	2133.9	2137.6
35°	2651.0	2648.6	2638.7	2627.7	2617.8	2584.6	2553.8	2518.1	2488.5	2470.0	2475.0
37.5°	2785.3	2785.3	2777.9	2775.4	2775.4	2795.1	2819.7	2864.1	2898.5	2901.0	2889.9
40°	2994.6	2994.6	2982.3	2976.1	2972.4	2978.6	2994.6	3010.6	3027.8	3031.5	3019.2
42.5°	3240.9	3229.8	3221.2	3208.8	3207.6	3213.8	3231.0	3250.7	3267.9	3282.7	3256.9
45°	3506.8	3497.0	3488.3	3481.0	3485.9	3501.9	3525.3	3559.8	3584.4	3606.6	3585.6
47.5°	3803.6	3782.6	3791.3	3783.9	3796.2	3828.2	3870.1	3921.8	3947.6	3987.0	3953.8
50°	4173.0	4177.9	4173.0	4173.0	4187.7	4229.6	4291.2	4361.4	4405.7	4427.9	4408.1
52.5°	4722.1	4707.4	4674.1	4684.0	4703.7	4770.2	4850.2	4948.7	5005.3	5058.3	4996.7
55°	5323.0	5325.5	5320.6	5334.1	5372.3	5440.0	5541.0	5690.0	5761.4	5853.7	5779.8
57.5°	5820.5	5837.7	5867.3	5907.9	5990.4	6103.7	6301.9	6529.7	6719.3	6819.1	6703.3
60°	5981.8	5999.0	6070.4	6183.7	6338.9	6570.4	6891.7	7282.1	7623.1	7800.5	7649.0
62.5°	5671.5	5703.5	5809.4	5965.8	6221.9	6583.9	7061.7	7639.1	8164.9	8407.5	8224.0
63°	5570.5	5606.2	5714.6	5873.4	6134.5	6512.5	7028.4	7646.5	8203.1	8459.2	8261.0
65°	5122.3	5145.7	5260.2	5441.2	5731.8	6125.8	6699.6	7431.1	8065.2	8361.9	8151.4
67.5°	4416.8	4447.6	4552.2	4708.6	4990.6	5408.0	5971.9	6700.9	7325.2	7562.8	7383.0
70°	3542.5	3577.0	3663.2	3808.5	4030.1	4416.8	4899.4	5580.4	6049.5	6235.4	6043.4
72.5°	2489.7	2504.5	2567.3	2720.0	2886.2	3194.1	3577.0	4106.5	4557.1	4679.0	4494.3
75°	1054.0	1055.2	1137.7	1235.0	1443.1	1749.7	2083.4	2539.0	2944.1	3133.7	2899.8
77.5°	337.4	341.1	364.5	400.2	469.1	605.8	852.1	1102.0	1473.9	1653.7	1434.5
80°	282.0	286.9	296.7	304.1	309.1	316.5	344.8	384.2	483.9	562.7	454.4
82.5°	242.6	251.2	273.4	282.0	286.9	289.4	293.1	291.8	285.7	283.2	284.4
85°	184.7	205.6	230.3	250.0	252.4	253.7	261.0	263.5	243.8	224.1	243.8
87.5°	80.0	103.4	158.8	176.1	172.4	160.1	171.2	181.0	165.0	120.7	161.3
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°	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3	1284.3
2.5°	1289.2	1291.7	1291.7	1291.7	1291.7	1292.9	1294.1	1292.9
5°	1316.3	1318.8	1317.5	1318.8	1318.8	1320.0	1321.2	1320.0
7.5°	1363.1	1363.1	1363.1	1365.5	1365.5	1368.0	1368.0	1368.0
10°	1421.0	1419.7	1419.7	1422.2	1424.6	1425.9	1428.3	1427.1
12.5°	1483.7	1481.3	1482.5	1485.0	1487.4	1488.7	1491.1	1489.9
15°	1540.4	1539.2	1539.2	1542.9	1544.1	1545.3	1550.2	1550.2
17.5°	1594.6	1594.6	1594.6	1599.5	1600.7	1605.6	1609.3	1609.3
20°	1648.7	1648.7	1648.7	1653.7	1657.4	1664.8	1672.1	1670.9
22.5°	1704.2	1705.4	1707.8	1712.8	1721.4	1732.5	1738.6	1738.6
25°	1773.1	1778.0	1783.0	1790.3	1802.7	1817.4	1827.3	1831.0
27.5°	1861.8	1872.8	1885.2	1896.2	1909.8	1928.3	1941.8	1944.3
30°	1982.4	1998.4	2018.1	2032.9	2050.2	2071.1	2087.1	2095.7
32.5°	2153.6	2193.0	2218.9	2271.8	2303.8	2339.5	2369.1	2381.4
35°	2505.7	2545.2	2579.6	2615.3	2622.7	2635.0	2651.0	2654.7
37.5°	2854.2	2822.2	2791.4	2790.2	2781.6	2784.0	2789.0	2795.1
40°	3005.7	2995.8	2979.8	2986.0	2987.2	2987.2	2997.0	2998.3
42.5°	3249.5	3226.1	3207.6	3222.4	3224.8	3227.3	3237.2	3248.2
45°	3559.8	3524.1	3500.7	3492.0	3500.7	3498.2	3511.7	3514.2
47.5°	3914.4	3867.6	3814.6	3797.4	3792.5	3781.4	3804.8	3802.3
50°	4349.0	4273.9	4209.9	4185.3	4173.0	4166.8	4173.0	4173.0
52.5°	4899.4	4824.3	4736.9	4708.6	4698.7	4712.3	4692.6	4713.5
55°	5656.7	5534.8	5415.4	5377.2	5371.0	5364.9	5367.4	5376.0
57.5°	6508.8	6292.1	6132.0	6038.4	5978.1	5948.5	5916.5	5911.6
60°	7331.3	6937.3	6633.2	6426.3	6279.8	6168.9	6112.3	6092.6
62.5°	7727.8	7151.5	6678.7	6326.6	6108.6	5927.6	5827.9	5802.0
63°	7738.9	7124.5	6623.3	6251.4	5997.8	5835.3	5729.4	5702.3
65°	7533.3	6833.9	6246.5	5837.7	5569.3	5399.4	5268.8	5240.5
67.5°	6784.6	6106.1	5505.3	5090.3	4799.7	4663.0	4519.0	4515.3
70°	5568.1	4962.2	4456.2	4074.5	3831.9	3696.4	3549.9	3553.6
72.5°	4070.8	3532.7	3184.2	2886.2	2630.1	2502.1	2364.1	2377.7
75°	2450.3	1970.1	1656.1	1397.6	1134.1	976.4	870.5	810.2
77.5°	1047.9	716.6	514.7	408.8	344.8	318.9	306.6	302.9
80°	364.5	322.6	304.1	299.2	295.5	290.6	282.0	273.4
82.5°	295.5	295.5	285.7	284.4	273.4	264.7	242.6	231.5
85°	262.3	257.3	248.7	245.0	242.6	224.1	195.8	181.0
87.5°	173.6	161.3	153.9	157.6	152.7	136.7	83.7	66.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)