

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: P144261

Luminaire Tested: **LDRL-5XQ-E05-E-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P144261  
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-E05-E-7050  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE EXTRA WIDE  
Light Source: (105) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15864.2 lumens  
Efficiency: N/A  
Efficacy: 124.6 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): 127.3  
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

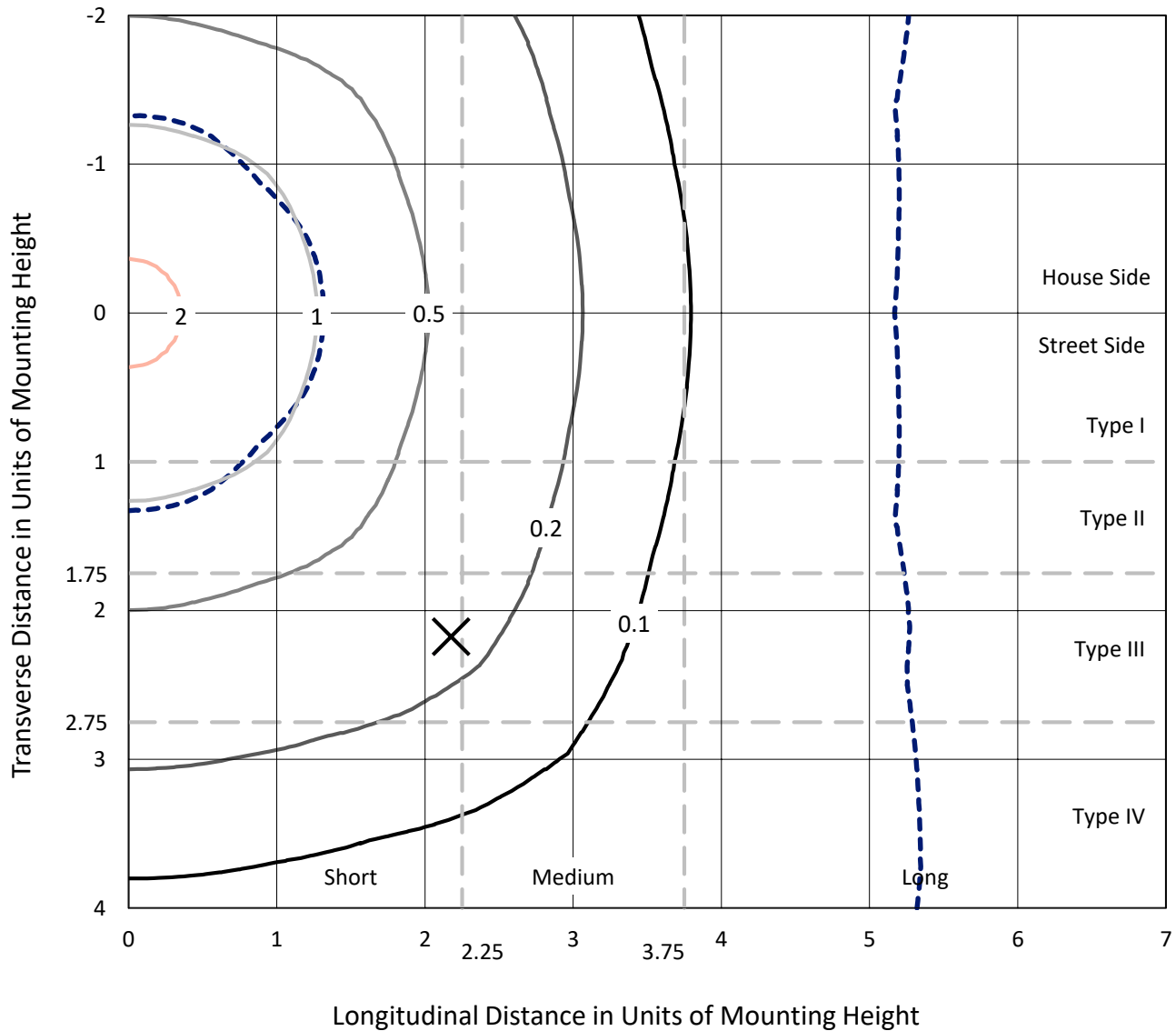


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### Iso-Footcandle Lines of Horizontal Illumination

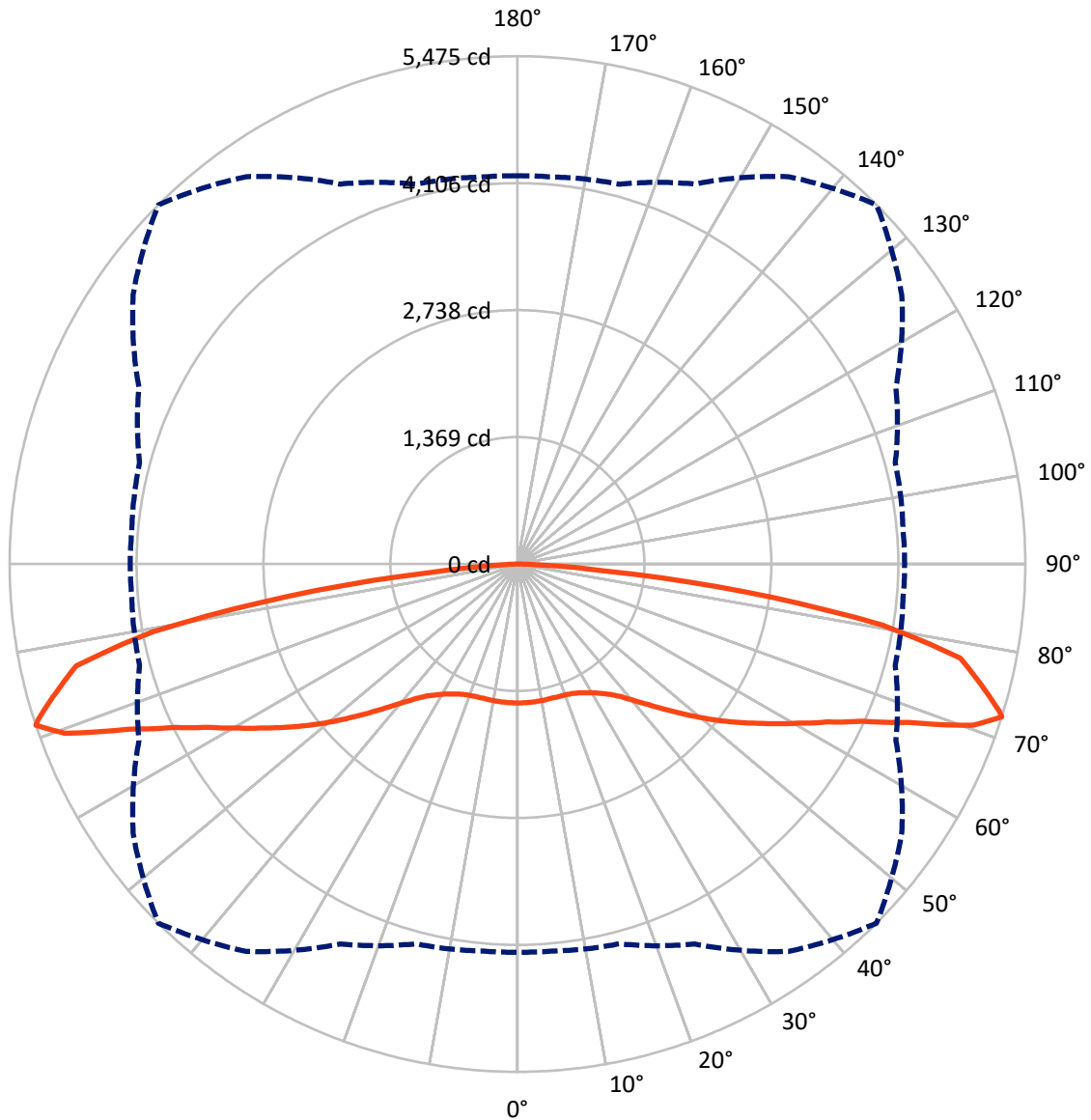
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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	7932.1	0.0	7932.1
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	7932.1	0.0	7932.1
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	15864.2	0.0	15864.2
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	0.9
10°-20°	424.7	2.7
20°-30°	713.5	4.5
30°-40°	1085.9	6.8
40°-50°	1716.7	10.8
50°-60°	2622.0	16.5
60°-70°	3841.2	24.2
70°-80°	4363.9	27.5
80°-90°	953.2	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°	15864.2	100.0
0°-180°	15864.2	100.0



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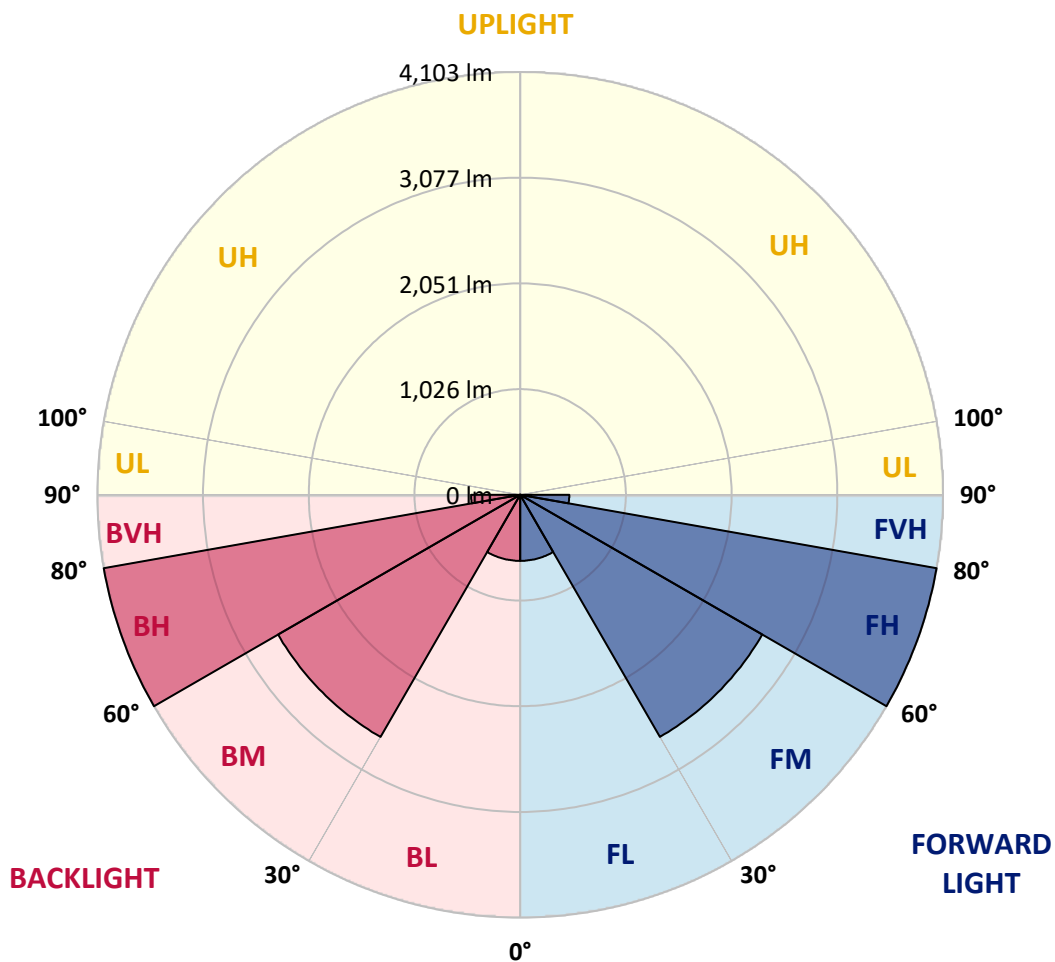
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	640.6	4.0			
FM	(30°-60°)	2712.3	17.1			
FH	(60°-80°)	4102.6	25.9			G2/5000
FVH	(80°-90°)	476.6	3.0			G3/500
BL	(0°-30°)	640.6	4.0	B2/1000		
BM	(30°-60°)	2712.3	17.1	B3/5000		
BH	(60°-80°)	4102.6	25.9	B4/5000		G2/5000
BVH	(80°-90°)	476.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1
2.5°	1501.2	1500.6	1499.6	1498.6	1498.1	1497.6	1497.6	1497.6	1497.3	1497.0	1497.3
5°	1501.2	1500.7	1499.9	1499.2	1498.4	1497.6	1497.6	1497.6	1497.4	1497.1	1497.6
7.5°	1499.2	1499.6	1498.9	1498.2	1497.9	1497.6	1497.4	1497.1	1496.6	1496.0	1496.3
10°	1499.6	1501.7	1500.2	1498.6	1498.1	1497.6	1496.6	1495.6	1495.3	1495.0	1494.5
12.5°	1500.7	1502.7	1500.9	1499.1	1498.4	1497.6	1496.6	1495.6	1494.8	1494.0	1493.2
15°	1503.8	1505.2	1503.7	1502.2	1500.6	1499.1	1498.1	1497.0	1495.5	1494.0	1493.2
17.5°	1505.8	1508.4	1506.6	1504.8	1503.0	1501.2	1500.2	1499.2	1498.1	1497.1	1495.8
20°	1509.4	1512.0	1510.4	1508.9	1507.8	1506.8	1506.0	1505.3	1504.5	1503.8	1501.9
22.5°	1516.1	1518.1	1517.6	1517.1	1517.4	1517.6	1517.8	1518.1	1517.6	1517.1	1515.3
25°	1529.9	1529.9	1530.9	1532.0	1533.5	1535.1	1536.3	1537.6	1538.4	1539.1	1536.8
27.5°	1554.0	1556.1	1556.9	1557.6	1560.2	1562.8	1565.6	1568.4	1569.9	1571.4	1569.1
30°	1585.4	1585.4	1587.2	1589.0	1593.3	1597.6	1601.2	1604.8	1607.7	1610.5	1608.7
32.5°	1625.4	1627.9	1630.4	1633.0	1638.4	1643.8	1650.0	1656.2	1659.8	1663.4	1660.5
35°	1686.4	1689.5	1692.0	1694.6	1700.2	1705.9	1712.8	1719.8	1722.8	1725.9	1724.1
37.5°	1772.6	1772.6	1776.2	1779.8	1783.4	1787.0	1796.2	1805.4	1809.3	1813.2	1810.1
40°	1889.0	1889.6	1890.4	1891.2	1894.5	1897.8	1909.1	1920.4	1927.0	1933.7	1927.3
42.5°	2023.0	2028.6	2028.4	2028.1	2030.4	2032.7	2043.5	2054.2	2063.8	2073.2	2069.4
45°	2181.0	2180.0	2177.9	2175.9	2182.8	2189.8	2205.1	2220.5	2229.0	2237.4	2229.4
47.5°	2340.6	2339.0	2336.2	2333.4	2340.3	2347.2	2370.3	2393.4	2405.4	2417.5	2404.7
50°	2499.6	2505.8	2502.2	2498.6	2508.8	2519.1	2548.3	2577.6	2595.2	2613.0	2598.1
52.5°	2675.6	2680.1	2676.0	2672.0	2686.1	2700.2	2734.9	2769.5	2793.1	2816.6	2796.6
55°	2857.7	2852.1	2854.4	2856.7	2870.0	2883.4	2925.9	2968.5	2996.7	3025.0	3002.4
57.5°	3028.0	3030.1	3027.8	3025.5	3046.5	3067.6	3121.2	3174.8	3210.2	3245.5	3217.4
60°	3202.4	3203.0	3197.9	3192.8	3215.6	3238.4	3315.4	3392.3	3438.2	3484.1	3445.4
62.5°	3397.4	3396.9	3387.9	3379.0	3405.9	3432.8	3528.3	3623.7	3686.8	3749.9	3702.7
65°	3636.5	3630.4	3625.2	3620.1	3651.1	3682.2	3800.7	3919.2	4004.4	4089.6	4028.7
67.5°	3989.0	3984.4	3973.6	3962.8	3997.5	4032.1	4184.0	4335.8	4445.8	4555.9	4475.6
70°	4376.8	4368.1	4375.5	4383.0	4463.0	4543.0	4746.8	4950.4	5080.8	5211.0	5076.1
72°	4185.5	4189.1	4214.0	4238.8	4379.2	4519.5	4808.8	5098.2	5286.8	5475.3	5266.7
72.5°	4118.8	4121.8	4150.1	4178.3	4312.2	4446.1	4744.4	5042.8	5238.0	5433.2	5218.8
75°	3835.6	3843.8	3876.4	3909.0	4044.7	4180.4	4481.2	4782.2	4969.2	5156.2	4941.5
77.5°	3373.3	3399.0	3432.1	3465.2	3626.8	3788.4	4128.5	4468.6	4675.2	4881.7	4638.0
80°	2574.5	2565.3	2622.2	2679.2	2833.6	2988.0	3251.2	3514.4	3752.2	3990.0	3716.0
82.5°	1000.4	1022.5	1140.5	1258.5	1420.4	1582.2	1818.0	2053.8	2268.0	2482.2	2254.1
85°	103.1	117.4	159.8	202.1	290.4	378.6	522.3	666.0	806.8	947.6	794.7
87.5°	41.6	45.7	58.7	71.8	75.2	78.5	94.9	111.3	110.6	109.8	108.3
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°	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1	1498.1
2.5°	1497.6	1498.1	1498.6	1498.6	1498.6	1499.4	1500.1	1499.1
5°	1498.2	1498.4	1498.6	1498.6	1498.6	1499.4	1500.1	1499.1
7.5°	1496.6	1496.6	1496.6	1497.4	1498.1	1498.4	1498.6	1498.1
10°	1494.0	1494.3	1494.6	1495.3	1496.1	1496.8	1497.6	1498.1
12.5°	1492.5	1492.8	1493.0	1493.8	1494.5	1495.3	1496.1	1497.1
15°	1492.4	1492.7	1493.0	1493.5	1494.0	1495.0	1496.1	1497.1
17.5°	1494.5	1494.0	1493.5	1494.0	1494.6	1495.8	1497.1	1498.1
20°	1500.2	1499.4	1498.6	1498.6	1498.6	1499.9	1501.2	1501.2
22.5°	1513.5	1510.9	1508.4	1507.9	1507.4	1507.6	1507.8	1508.4
25°	1534.6	1530.4	1526.4	1525.1	1523.8	1523.2	1522.8	1523.8
27.5°	1566.8	1562.2	1557.6	1554.8	1552.0	1550.4	1548.9	1549.4
30°	1606.8	1601.5	1596.1	1591.5	1586.8	1584.8	1582.8	1583.3
32.5°	1657.6	1651.2	1644.8	1638.7	1632.5	1629.7	1626.9	1627.4
35°	1722.4	1714.9	1707.4	1702.3	1697.2	1692.8	1688.4	1692.0
37.5°	1807.0	1800.0	1793.1	1789.8	1786.4	1782.6	1778.8	1779.3
40°	1920.8	1913.7	1906.5	1903.7	1900.8	1896.0	1891.1	1892.1
42.5°	2065.6	2054.8	2044.0	2038.9	2033.8	2031.4	2029.2	2030.7
45°	2221.5	2210.8	2200.0	2195.6	2191.2	2185.1	2179.0	2184.6
47.5°	2391.9	2378.2	2364.6	2357.0	2349.2	2351.3	2353.4	2348.8
50°	2583.2	2560.4	2537.6	2528.6	2519.6	2519.6	2519.6	2519.1
52.5°	2776.6	2745.1	2713.6	2705.9	2698.2	2696.4	2694.6	2692.5
55°	2979.8	2941.1	2902.4	2888.0	2873.6	2875.7	2877.8	2883.4
57.5°	3189.1	3138.1	3087.0	3070.6	3054.2	3055.5	3056.8	3066.0
60°	3406.7	3340.8	3274.8	3256.6	3238.4	3243.2	3248.1	3253.8
62.5°	3655.5	3575.7	3496.0	3471.6	3447.2	3453.4	3459.5	3474.4
65°	3968.0	3868.4	3768.8	3743.5	3718.1	3720.9	3723.7	3749.4
67.5°	4395.4	4262.7	4130.1	4106.8	4083.4	4087.5	4091.6	4133.2
70°	4941.2	4744.7	4548.2	4451.5	4354.8	4339.6	4324.5	4346.6
72°	5058.2	4780.6	4503.0	4360.4	4217.8	4195.5	4173.2	4175.2
72.5°	5004.3	4723.7	4443.0	4304.5	4166.0	4147.8	4129.6	4126.0
75°	4726.8	4452.3	4177.8	4034.6	3891.5	3856.9	3822.2	3822.2
77.5°	4394.3	4048.2	3702.2	3547.8	3393.4	3357.2	3321.0	3292.8
80°	3442.0	3131.9	2821.8	2665.0	2508.3	2450.4	2392.4	2358.0
82.5°	2026.0	1740.8	1455.6	1256.5	1057.4	997.6	937.9	854.7
85°	641.8	493.8	345.8	269.8	193.9	156.7	119.6	104.7
87.5°	106.8	86.7	66.7	64.4	62.1	48.8	35.4	29.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)