

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: STREETWORKS

Report Number: P299587

Luminaire Tested: **GAA-AF-03-LED-U-5MQ-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299587  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-03-LED-U-5MQ-7027  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16529.7 lumens  
Efficiency: N/A  
Efficacy: 99.6 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): 166  
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: 28.75 FT

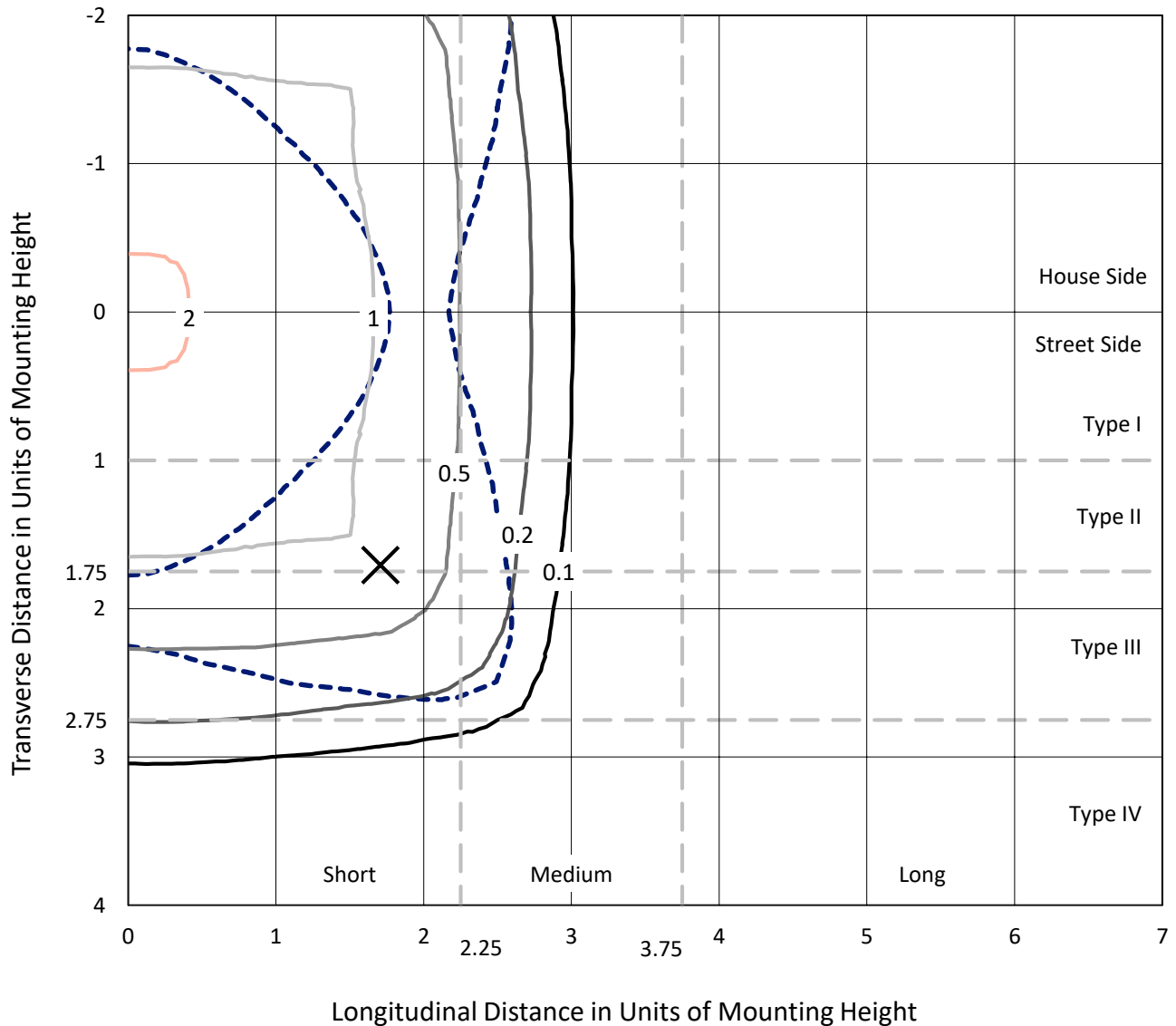


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### Iso-Footcandle Lines of Horizontal Illumination

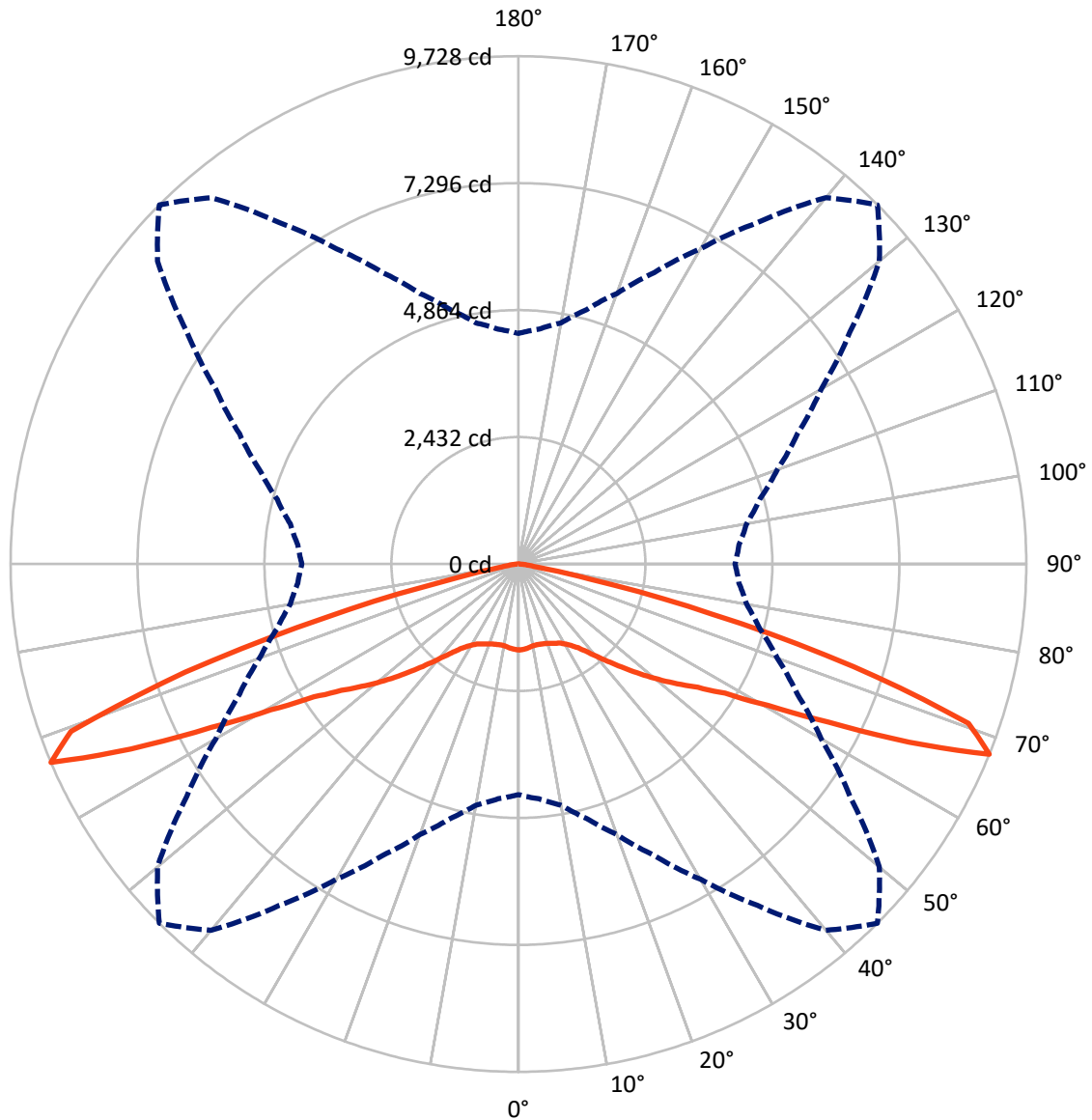
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8264.8	0.0	8264.8
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	8264.8	0.0	8264.8
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	16529.7	0.0	16529.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.2	0.9
10°-20°	447.4	2.7
20°-30°	760.6	4.6
30°-40°	1243.3	7.5
40°-50°	2219.4	13.4
50°-60°	3742.1	22.6
60°-70°	5807.1	35.1
70°-80°	2040.4	12.3
80°-90°	115.3	0.7
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°	16529.7	100.0
0°-180°	16529.7	100.0



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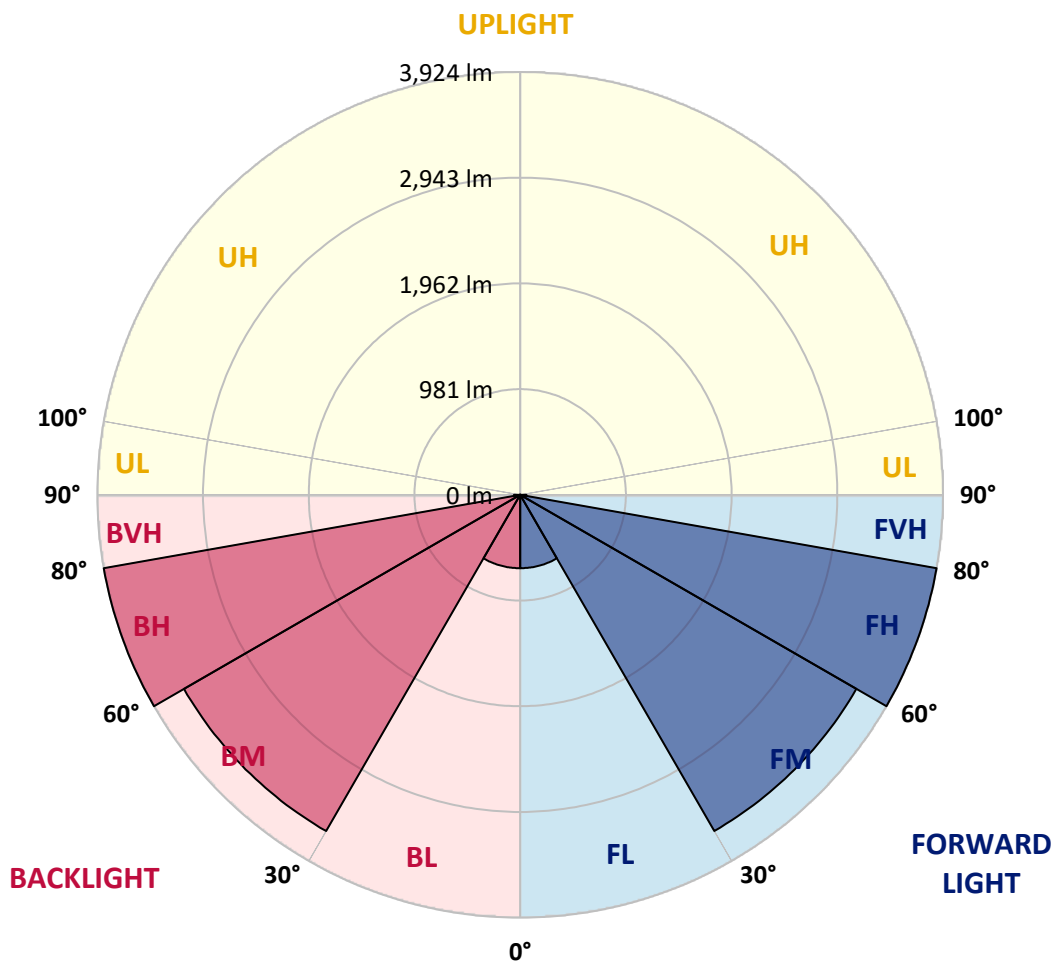
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	681.1	4.1			
FM	(30°-60°)	3602.4	21.8			
FH	(60°-80°)	3923.7	23.7			G2/5000
FVH	(80°-90°)	57.7	0.3			G1/100
BL	(0°-30°)	681.1	4.1	B2/1000		
BM	(30°-60°)	3602.4	21.8	B3/5000		
BH	(60°-80°)	3923.7	23.7	B4/5000		G2/5000
BVH	(80°-90°)	57.7	0.3			G1/100
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°	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3
2.5°	1641.2	1642.7	1642.7	1642.7	1641.9	1641.9	1640.4	1641.9	1641.2	1638.9	1639.6
5°	1627.5	1629.0	1629.0	1628.2	1630.5	1629.8	1627.5	1629.0	1628.2	1626.7	1627.5
7.5°	1607.7	1610.0	1610.0	1609.2	1611.5	1610.8	1609.2	1610.0	1610.0	1607.7	1607.7
10°	1585.7	1587.2	1587.2	1586.4	1590.2	1590.2	1589.5	1591.8	1592.5	1590.2	1588.7
12.5°	1565.2	1567.4	1567.4	1570.5	1574.3	1575.8	1579.6	1582.6	1585.7	1584.9	1581.9
15°	1553.0	1554.5	1557.6	1561.4	1567.4	1572.8	1578.8	1585.7	1591.8	1593.3	1588.7
17.5°	1545.4	1547.7	1552.2	1557.6	1565.9	1575.0	1584.2	1593.3	1601.6	1604.7	1599.4
20°	1543.1	1544.6	1549.2	1558.3	1569.7	1583.4	1596.3	1607.0	1618.4	1622.2	1618.4
22.5°	1547.7	1550.7	1556.0	1566.7	1581.9	1599.4	1614.6	1629.0	1643.4	1650.3	1645.0
25°	1568.2	1571.2	1578.1	1591.8	1608.5	1626.7	1644.2	1660.9	1673.9	1680.7	1676.9
27.5°	1606.2	1610.0	1618.4	1632.0	1650.3	1670.1	1689.1	1702.7	1713.4	1715.7	1711.1
30°	1663.2	1671.6	1681.5	1696.7	1717.9	1734.7	1753.7	1765.8	1778.8	1778.8	1775.0
32.5°	1752.2	1760.5	1771.2	1785.6	1802.3	1820.6	1837.3	1847.9	1861.6	1862.4	1853.3
35°	1885.2	1889.0	1898.1	1907.2	1922.4	1938.4	1952.8	1959.7	1971.1	1971.8	1963.5
37.5°	2060.8	2061.5	2067.6	2070.7	2084.3	2101.8	2115.5	2120.1	2130.7	2129.2	2120.8
40°	2265.3	2269.1	2271.3	2275.9	2290.3	2307.1	2321.5	2323.8	2335.2	2332.9	2322.3
42.5°	2501.7	2503.2	2516.1	2522.9	2536.6	2545.0	2563.2	2565.5	2579.2	2573.1	2561.0
45°	2767.0	2780.6	2792.8	2806.5	2820.9	2830.8	2845.3	2842.2	2851.3	2842.2	2835.4
47.5°	3045.9	3055.8	3083.2	3104.5	3128.0	3136.4	3156.9	3147.8	3156.9	3144.0	3141.7
50°	3353.0	3370.5	3394.1	3418.4	3443.5	3457.2	3483.8	3472.4	3484.5	3472.4	3465.5
52.5°	3655.6	3660.1	3711.8	3747.6	3782.5	3798.5	3814.4	3809.1	3809.9	3809.1	3802.3
55°	3942.9	3953.6	4005.2	4053.9	4114.7	4159.6	4186.9	4183.9	4177.0	4170.2	4158.8
57.5°	4266.7	4277.4	4336.7	4396.7	4465.9	4529.7	4585.2	4642.3	4664.3	4670.4	4645.3
60°	4704.6	4703.8	4782.9	4855.9	4954.7	5049.7	5171.3	5295.2	5437.4	5503.5	5416.1
62.5°	5150.0	5168.3	5282.3	5411.5	5615.2	5813.6	6037.9	6258.3	6483.3	6666.5	6471.9
65°	5096.8	5166.8	5336.3	5628.9	6005.2	6452.2	6935.6	7447.2	7909.4	8227.1	7870.6
67.5°	4417.2	4516.8	4689.4	5045.1	5515.7	6160.3	6972.1	7983.9	9159.8	9728.4	9023.8
70°	3201.8	3314.3	3495.2	3842.6	4308.5	4921.2	5803.0	7017.7	8574.5	9147.7	8371.6
72.5°	1593.3	1654.1	1765.8	1987.0	2339.7	2836.9	3636.6	4804.2	6181.6	6707.6	5998.4
75°	541.2	569.4	588.4	660.6	772.3	967.7	1365.2	2100.3	3204.0	3841.1	3158.4
77.5°	312.4	313.2	326.1	339.0	358.0	379.3	432.5	567.8	982.1	1394.9	1016.3
80°	202.2	201.4	212.1	222.0	234.9	245.5	248.6	263.0	303.3	359.6	321.5
82.5°	104.9	117.8	141.4	154.3	178.6	183.2	177.1	171.8	181.7	188.5	193.1
85°	57.8	50.2	75.3	97.3	107.9	109.5	109.5	103.4	107.2	104.9	114.0
87.5°	26.6	24.3	29.6	47.9	50.9	43.3	45.6	40.3	28.9	28.1	31.9
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°	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3	1647.3
2.5°	1639.6	1640.4	1640.4	1642.7	1643.4	1645.0	1646.5	1647.3
5°	1626.7	1629.0	1627.5	1629.8	1629.8	1631.3	1631.3	1632.0
7.5°	1607.7	1610.0	1610.0	1610.0	1609.2	1611.5	1611.5	1611.5
10°	1588.0	1589.5	1588.7	1587.2	1585.7	1588.0	1587.2	1586.4
12.5°	1581.9	1578.1	1575.0	1573.5	1570.5	1571.2	1569.0	1569.0
15°	1585.7	1578.8	1573.5	1571.2	1568.2	1566.7	1565.2	1565.9
17.5°	1595.6	1587.2	1580.4	1576.6	1572.8	1570.5	1567.4	1568.2
20°	1613.0	1603.2	1593.3	1585.7	1578.8	1575.0	1572.8	1572.0
22.5°	1638.9	1624.4	1610.0	1598.6	1589.5	1584.2	1581.9	1580.4
25°	1668.5	1652.6	1635.8	1622.9	1613.8	1607.0	1602.4	1602.4
27.5°	1705.8	1692.9	1677.7	1662.5	1654.1	1647.3	1644.2	1642.7
30°	1768.1	1756.0	1743.8	1729.3	1718.7	1711.9	1706.5	1702.0
32.5°	1847.9	1838.0	1828.2	1817.5	1807.6	1798.5	1790.2	1786.4
35°	1960.4	1952.8	1946.0	1933.8	1930.0	1924.7	1920.1	1916.3
37.5°	2115.5	2112.5	2112.5	2099.5	2096.5	2094.2	2089.7	2090.4
40°	2319.2	2322.3	2318.5	2313.9	2311.6	2305.5	2305.5	2310.9
42.5°	2560.2	2562.5	2570.8	2563.2	2571.6	2564.0	2559.4	2563.2
45°	2839.9	2848.3	2865.0	2857.4	2862.7	2849.8	2833.8	2834.6
47.5°	3153.9	3161.5	3168.3	3163.0	3163.8	3142.5	3121.2	3115.9
50°	3480.0	3483.0	3486.8	3479.2	3480.7	3457.2	3432.8	3433.6
52.5°	3802.3	3816.7	3831.9	3811.4	3806.8	3780.2	3746.0	3732.3
55°	4171.0	4191.5	4174.0	4138.3	4102.5	4066.8	4022.0	4014.4
57.5°	4625.5	4590.6	4535.8	4468.2	4418.8	4368.6	4323.0	4304.0
60°	5258.0	5126.5	5027.6	4927.3	4864.2	4802.6	4742.6	4733.5
62.5°	6151.9	5924.6	5727.7	5520.2	5350.7	5218.4	5112.8	5083.1
65°	7272.4	6735.0	6269.0	5834.2	5456.4	5171.3	4991.9	4912.9
67.5°	7754.3	6693.1	5894.2	5277.0	4782.9	4437.8	4243.9	4147.4
70°	6814.0	5550.6	4681.8	4063.8	3613.8	3245.9	3070.3	2966.9
72.5°	4687.9	3530.9	2792.0	2278.9	1919.4	1611.5	1489.9	1480.8
75°	2104.9	1394.1	960.8	740.4	623.3	542.0	516.9	497.9
77.5°	589.1	435.6	388.4	363.4	339.0	310.9	300.3	302.5
80°	286.6	270.6	260.0	244.0	222.0	198.4	187.8	192.3
82.5°	190.0	187.8	194.6	183.2	151.3	128.5	107.9	98.8
85°	115.5	117.1	119.3	120.1	101.9	71.5	48.6	54.7
87.5°	45.6	52.5	57.0	59.3	55.5	34.2	27.4	28.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)