

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: P299899

Luminaire Tested: **GAA-AF-05-LED-U-5WQ-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299899
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-05-LED-U-5WQ-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
w/Spill Control OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21918.8 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 210
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

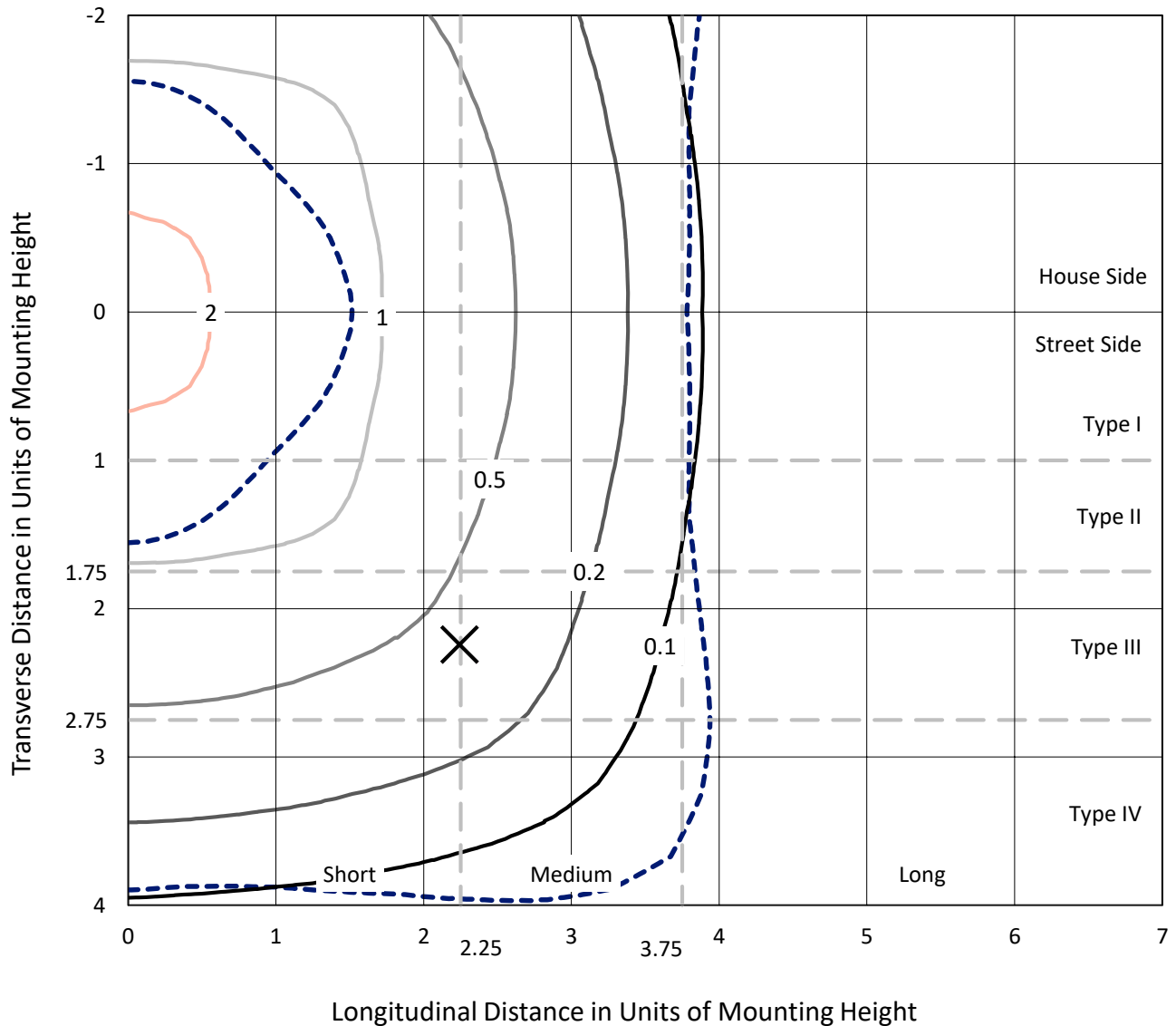


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

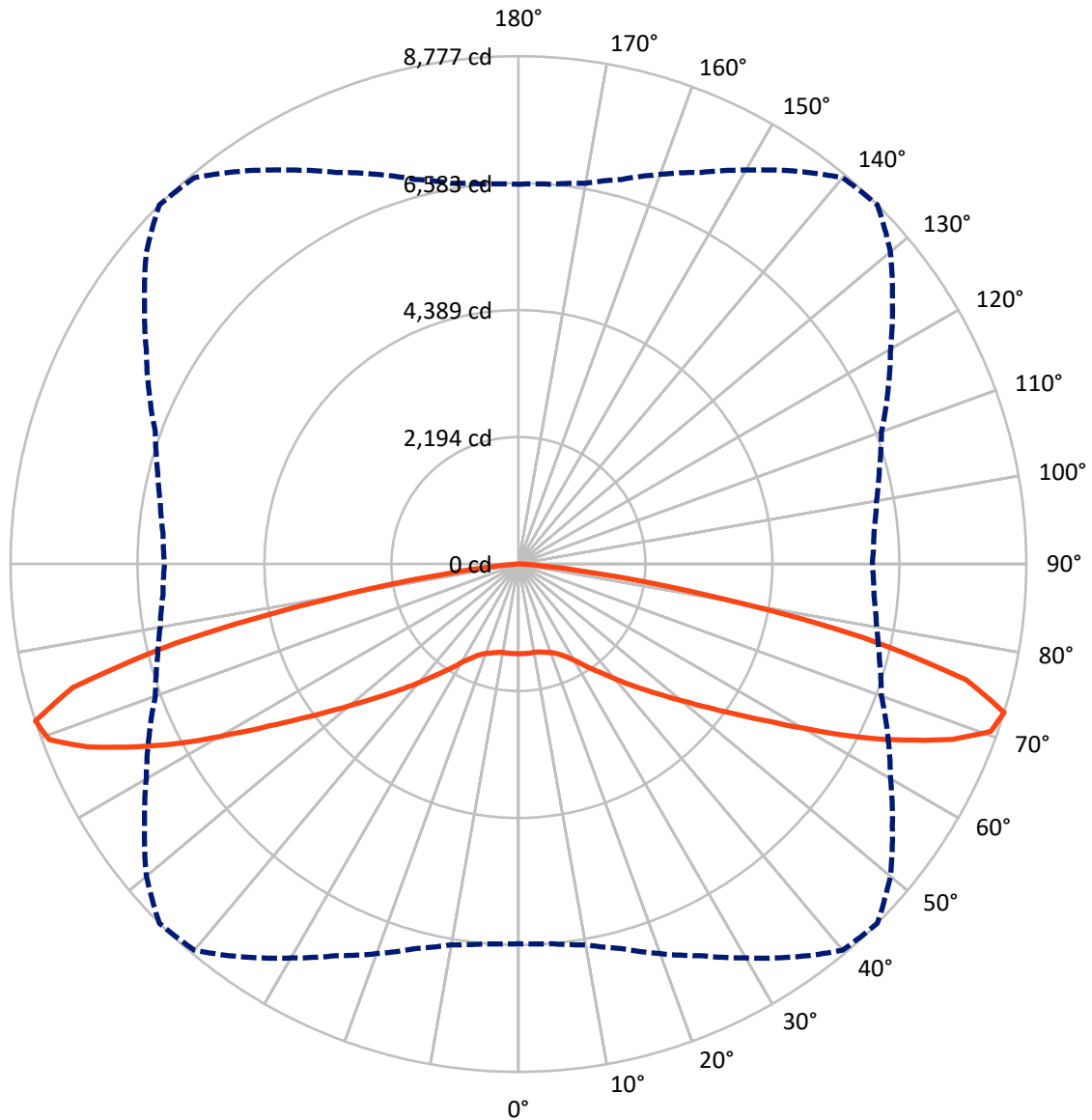


Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10959.4	0.0	10959.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	10959.4	0.0	10959.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	21918.8	0.0	21918.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.2	0.7
10°-20°	450.2	2.1
20°-30°	822.6	3.8
30°-40°	1418.3	6.5
40°-50°	2424.6	11.1
50°-60°	3930.0	17.9
60°-70°	6519.7	29.7
70°-80°	5742.3	26.2
80°-90°	463.0	2.1
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°	21918.8	100.0
0°-180°	21918.8	100.0



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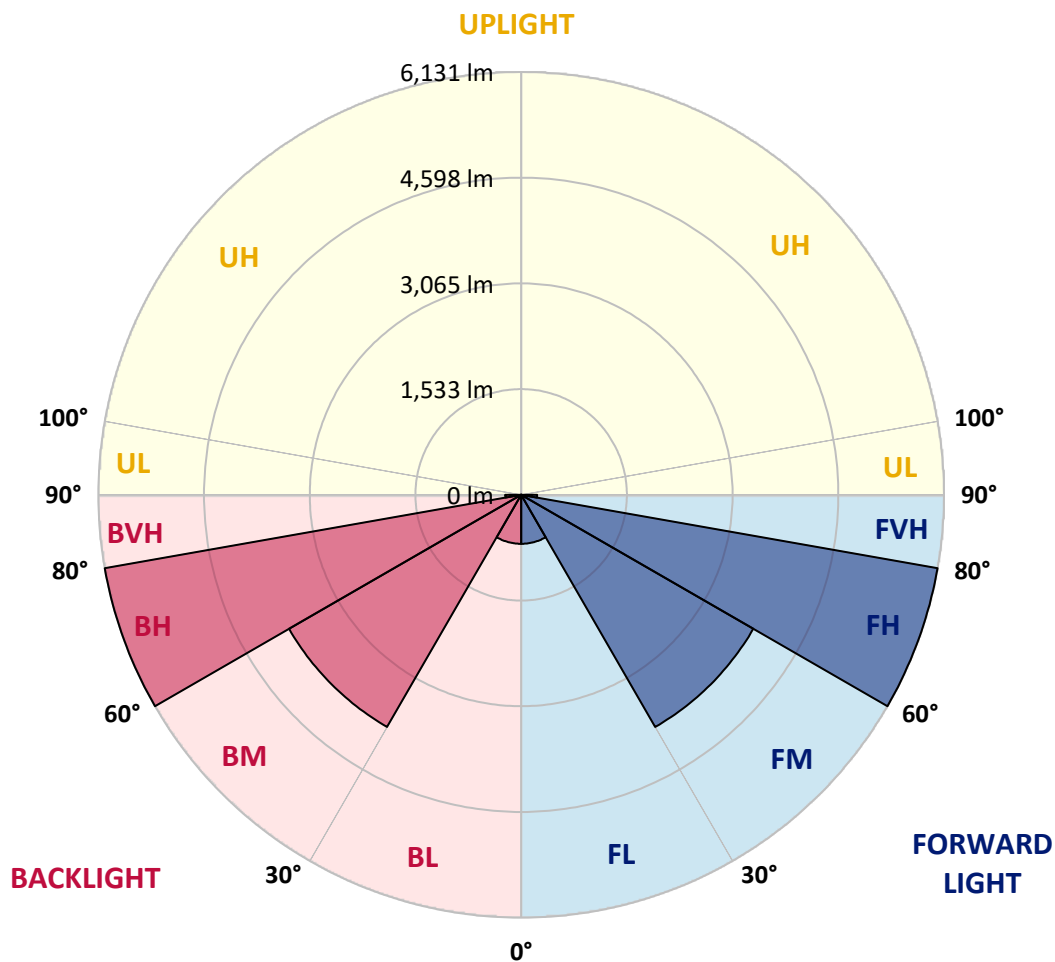
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	710.5	3.2			
FM	(30°-60°)	3886.4	17.7			
FH	(60°-80°)	6131.0	28.0			G3/7500
FVH	(80°-90°)	231.5	1.1			G3/500
BL	(0°-30°)	710.5	3.2	B2/1000		
BM	(30°-60°)	3886.4	17.7	B3/5000		
BH	(60°-80°)	6131.0	28.0	B5		G3/7500
BVH	(80°-90°)	231.5	1.1			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2
2.5°	1552.2	1553.2	1554.2	1553.2	1553.2	1552.2	1551.2	1552.2	1551.2	1549.2	1550.2
5°	1557.2	1559.2	1559.2	1557.2	1558.2	1557.2	1555.2	1556.2	1554.2	1551.2	1551.2
7.5°	1563.3	1564.3	1564.3	1562.2	1563.3	1561.2	1559.2	1558.2	1556.2	1552.2	1549.2
10°	1572.3	1573.3	1572.3	1570.3	1570.3	1567.3	1562.2	1560.2	1556.2	1550.2	1547.2
12.5°	1582.4	1583.4	1582.4	1580.3	1579.3	1574.3	1570.3	1567.3	1564.3	1559.2	1554.2
15°	1596.4	1598.4	1596.4	1592.4	1589.4	1585.4	1583.4	1584.4	1585.4	1581.3	1576.3
17.5°	1622.6	1623.6	1620.6	1611.5	1607.5	1603.5	1603.5	1605.5	1608.5	1606.5	1601.5
20°	1670.8	1667.8	1660.8	1649.7	1644.7	1637.6	1636.6	1637.6	1637.6	1636.6	1632.6
22.5°	1731.1	1729.1	1720.1	1706.0	1699.0	1694.9	1688.9	1683.9	1682.9	1679.9	1675.8
25°	1803.5	1802.5	1791.5	1779.4	1774.4	1769.3	1764.3	1757.3	1751.2	1744.2	1740.2
27.5°	1896.0	1892.0	1875.9	1869.9	1862.8	1859.8	1852.8	1844.7	1839.7	1830.7	1825.6
30°	1997.5	1997.5	1984.5	1982.5	1982.5	1975.4	1967.4	1953.3	1944.3	1935.2	1932.2
32.5°	2099.1	2100.1	2087.0	2091.0	2094.1	2099.1	2101.1	2096.1	2090.0	2089.0	2083.0
35°	2245.9	2241.8	2228.8	2231.8	2230.8	2229.8	2229.8	2240.8	2242.8	2244.8	2232.8
37.5°	2427.8	2427.8	2414.7	2414.7	2408.7	2402.7	2394.6	2401.7	2412.7	2415.8	2407.7
40°	2635.9	2642.9	2626.9	2625.9	2627.9	2608.8	2599.7	2610.8	2617.8	2629.9	2620.8
42.5°	2881.2	2876.2	2860.1	2858.1	2847.0	2841.0	2833.0	2842.0	2853.1	2861.1	2864.1
45°	3116.4	3112.4	3094.3	3094.3	3083.3	3078.2	3082.3	3097.3	3102.4	3113.4	3124.5
47.5°	3348.7	3343.6	3331.6	3336.6	3337.6	3346.7	3359.7	3373.8	3387.9	3403.0	3408.0
50°	3585.9	3586.9	3573.9	3585.9	3601.0	3626.1	3661.3	3684.4	3713.6	3732.7	3738.7
52.5°	3802.1	3806.1	3820.2	3848.3	3878.5	3927.7	3988.0	4044.3	4092.6	4124.8	4122.8
55°	4061.4	4067.5	4101.6	4149.9	4199.2	4273.6	4363.0	4462.6	4543.0	4589.2	4560.1
57.5°	4393.2	4406.3	4444.5	4509.8	4583.2	4679.7	4802.3	4952.1	5076.8	5139.1	5091.9
60°	4848.6	4856.6	4902.9	4975.3	5063.7	5183.4	5347.2	5548.3	5724.2	5806.6	5752.4
62.5°	5448.8	5463.8	5501.0	5574.4	5664.9	5800.6	6000.7	6252.0	6471.2	6585.8	6463.1
65°	6165.5	6213.8	6245.0	6319.4	6403.8	6547.6	6756.7	7026.1	7261.3	7336.7	7195.0
67.5°	6875.3	6917.5	6971.8	7057.2	7142.7	7304.6	7498.6	7760.0	8018.3	8086.7	7866.5
70°	7185.9	7210.1	7294.5	7411.1	7575.0	7766.0	7990.2	8283.7	8603.4	8659.7	8380.2
72.5°	6563.6	6587.8	6682.3	6880.3	7165.8	7469.4	7860.5	8291.8	8714.0	8777.3	8392.3
75°	4964.2	4925.0	5064.7	5327.1	5712.1	6135.4	6682.3	7300.5	7910.8	7990.2	7530.7
77.5°	2565.5	2560.5	2666.1	2991.8	3451.2	3932.8	4534.9	5233.6	5830.8	6072.0	5698.1
80°	722.8	730.9	781.1	943.0	1211.4	1559.2	2029.7	2684.2	3172.7	3422.1	3213.0
82.5°	283.5	305.6	324.7	354.9	390.1	441.3	589.1	876.6	1176.2	1405.4	1151.1
85°	101.5	108.6	153.8	182.0	185.0	195.0	222.2	259.4	312.7	373.0	306.6
87.5°	38.2	42.2	49.3	81.4	80.4	73.4	89.5	93.5	70.4	64.3	79.4
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°	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2	1552.2
2.5°	1548.2	1549.2	1549.2	1550.2	1551.2	1551.2	1553.2	1553.2
5°	1549.2	1549.2	1547.2	1548.2	1547.2	1547.2	1548.2	1548.2
7.5°	1547.2	1546.2	1544.2	1543.1	1541.1	1541.1	1541.1	1541.1
10°	1544.2	1543.1	1541.1	1540.1	1539.1	1539.1	1539.1	1539.1
12.5°	1552.2	1549.2	1547.2	1546.2	1546.2	1546.2	1546.2	1546.2
15°	1573.3	1566.3	1561.2	1561.2	1562.2	1564.3	1564.3	1566.3
17.5°	1599.4	1591.4	1586.4	1582.4	1584.4	1587.4	1589.4	1591.4
20°	1630.6	1626.6	1619.5	1615.5	1615.5	1619.5	1621.6	1622.6
22.5°	1673.8	1670.8	1667.8	1662.8	1662.8	1664.8	1668.8	1668.8
25°	1738.2	1736.2	1734.2	1730.1	1729.1	1729.1	1731.1	1733.1
27.5°	1818.6	1819.6	1817.6	1816.6	1813.6	1812.6	1815.6	1814.6
30°	1926.2	1931.2	1936.2	1932.2	1927.2	1924.2	1921.1	1917.1
32.5°	2071.9	2065.9	2061.9	2054.8	2045.8	2037.8	2031.7	2024.7
35°	2209.7	2199.6	2195.6	2201.6	2200.6	2195.6	2188.6	2182.5
37.5°	2378.6	2376.5	2378.6	2389.6	2387.6	2392.6	2378.6	2377.5
40°	2591.7	2593.7	2607.8	2620.8	2627.9	2634.9	2626.9	2618.8
42.5°	2839.0	2838.0	2843.0	2861.1	2873.2	2881.2	2864.1	2862.1
45°	3100.4	3093.3	3097.3	3112.4	3124.5	3133.5	3114.4	3114.4
47.5°	3387.9	3375.8	3362.7	3379.8	3386.9	3392.9	3377.8	3372.8
50°	3708.6	3683.4	3655.3	3662.3	3662.3	3660.3	3641.2	3640.2
52.5°	4076.5	4030.3	3979.0	3959.9	3948.8	3936.8	3903.6	3887.5
55°	4499.8	4430.4	4350.0	4300.7	4274.6	4241.4	4186.1	4171.0
57.5°	4994.4	4885.8	4747.1	4686.7	4628.4	4574.1	4512.8	4495.7
60°	5580.5	5420.6	5236.6	5125.1	5061.7	5009.4	4946.1	4943.1
62.5°	6233.9	5981.6	5773.5	5672.9	5626.7	5580.5	5520.1	5528.2
65°	6898.4	6635.0	6440.0	6358.6	6315.3	6277.1	6216.8	6225.9
67.5°	7553.9	7311.6	7097.5	7014.0	6965.8	6917.5	6863.2	6872.3
70°	8024.4	7723.8	7482.5	7297.5	7181.9	7051.2	6966.8	6945.7
72.5°	7889.6	7426.2	7043.2	6676.2	6461.1	6286.2	6167.6	6116.3
75°	6828.0	6194.7	5702.1	5251.7	4998.4	4792.3	4642.5	4549.0
77.5°	5070.8	4359.0	3776.9	3258.2	2848.0	2572.6	2378.6	2252.9
80°	2775.7	2111.1	1543.1	1084.7	797.2	662.5	585.1	547.9
82.5°	864.6	557.9	411.2	354.9	329.7	315.7	292.5	255.3
85°	275.5	241.3	224.2	214.1	204.1	177.9	122.6	111.6
87.5°	106.6	109.6	108.6	102.5	104.6	75.4	60.3	53.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)