

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: P271201

Luminaire Tested: **XNV-AF-01-LED-U-5MQ-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271201
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24129)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-5MQ-7027
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5596.4 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B3 - U0 - G1

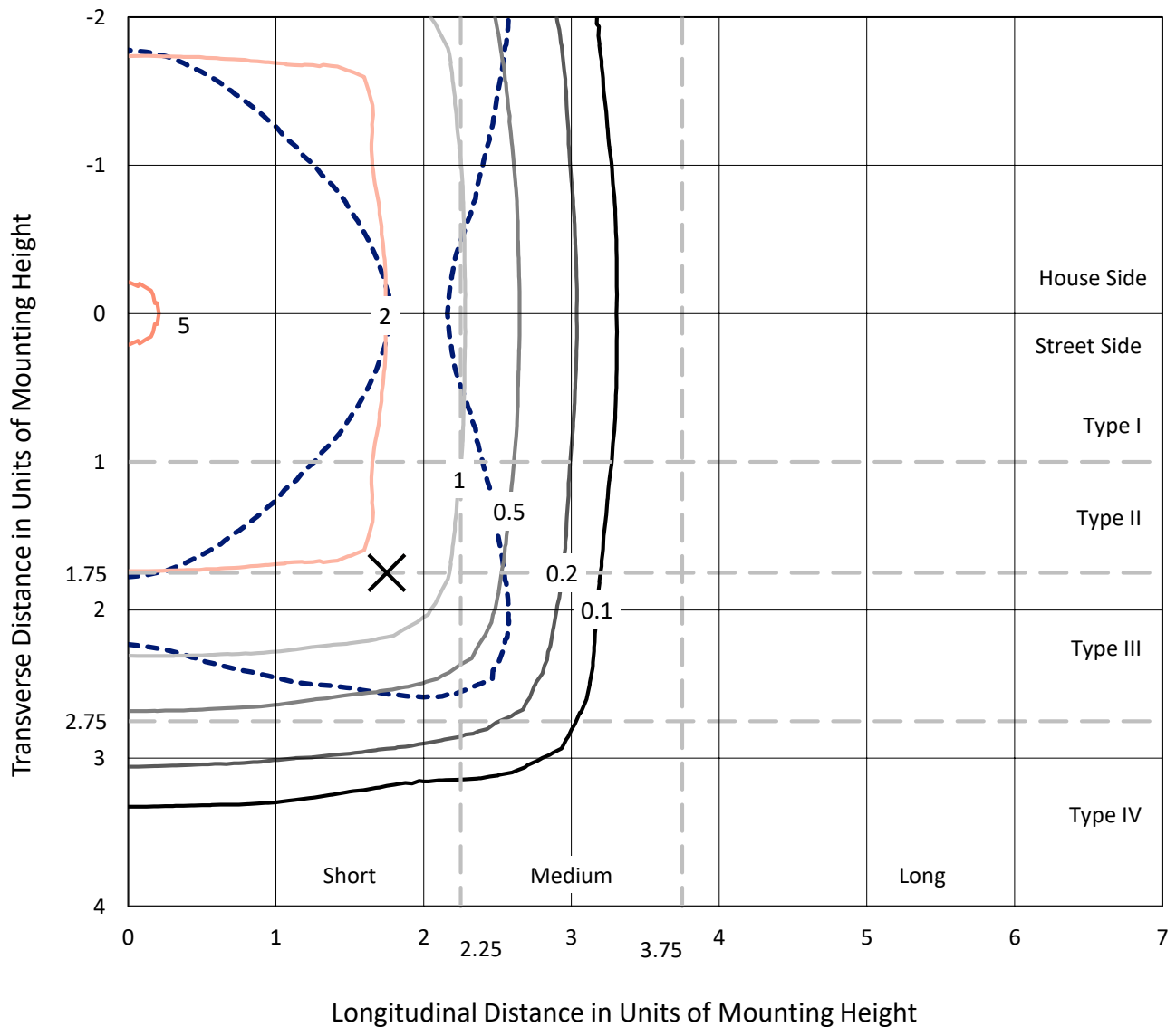
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P271201
 CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-7027

Iso-Footcandle Lines of Horizontal Illumination

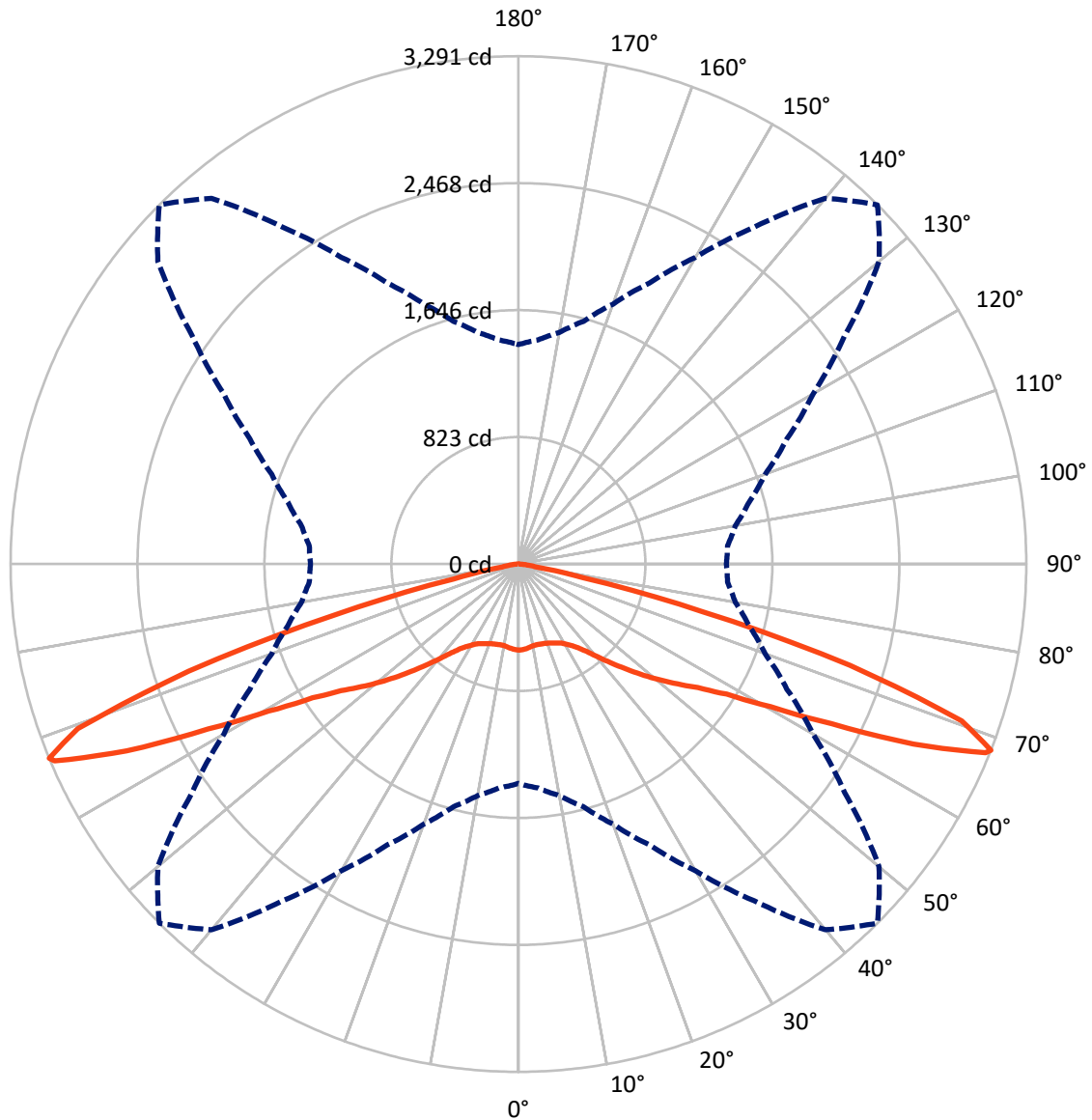
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P271201
CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-7027

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P271201
 CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-7027

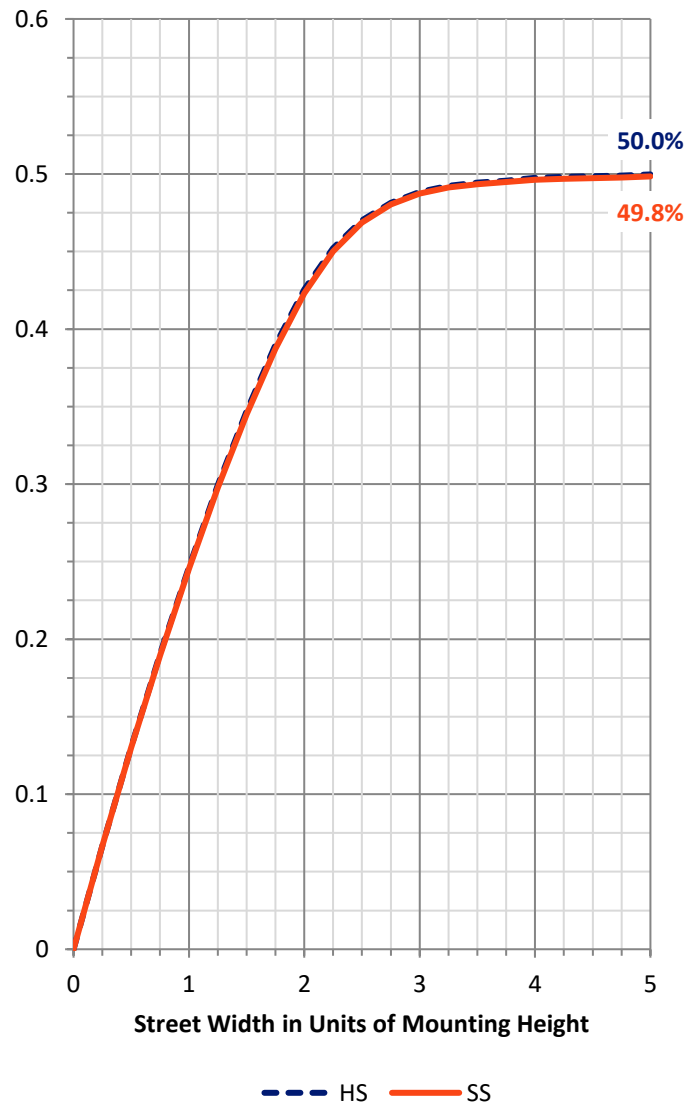
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2798.2	0.0	2798.2
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2798.2	0.0	2798.2
	% Fixture	50.0	0.0	50.0
Total	Lumens	5596.4	0.0	5596.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.2	0.9
10°-20°	151.5	2.7
20°-30°	257.6	4.6
30°-40°	421.5	7.5
40°-50°	753.3	13.5
50°-60°	1272.2	22.7
60°-70°	1972.7	35.2
70°-80°	678.2	12.1
80°-90°	37.3	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°	5596.4	100.0
0°-180°	5596.4	100.0



REPORT NUMBER: P271201

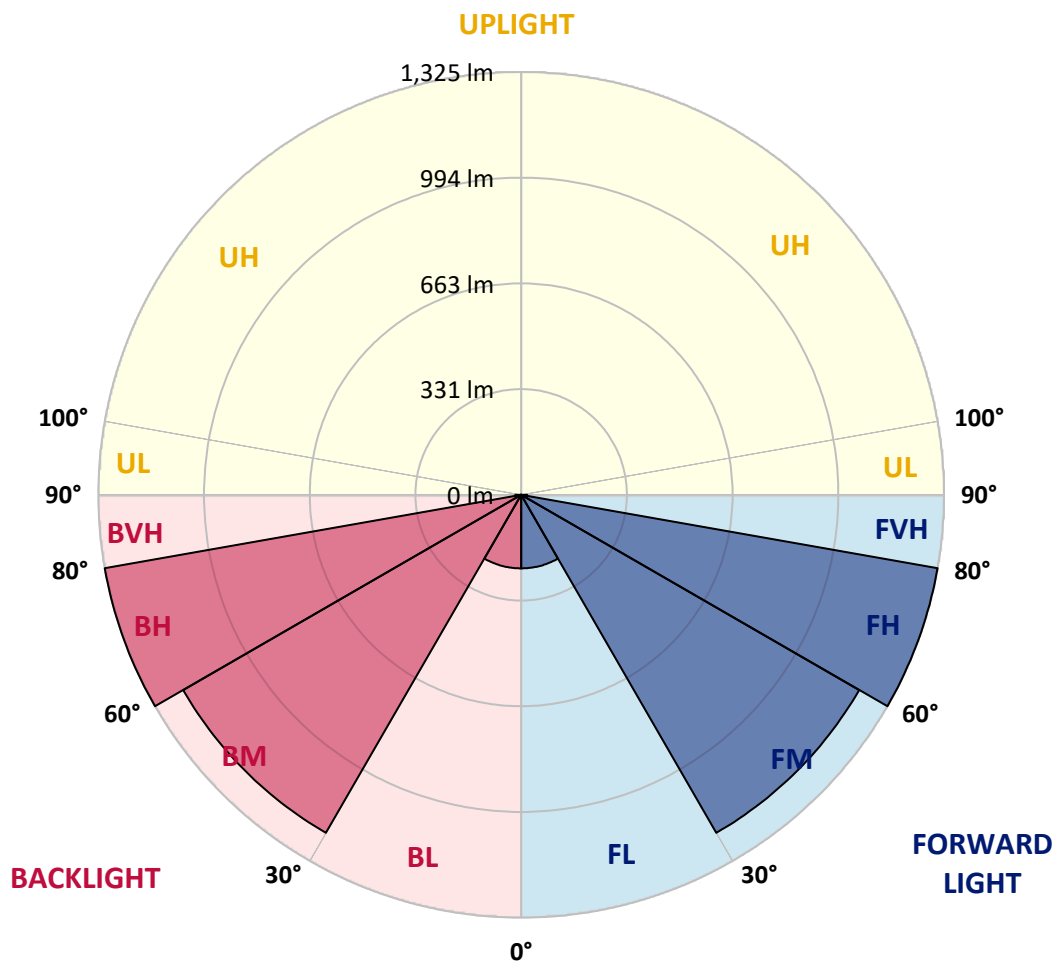
CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	230.6	4.1			
FM	(30°-60°)	1223.5	21.9			
FH	(60°-80°)	1325.4	23.7			G1/1800
FVH	(80°-90°)	18.6	0.3			G1/100
BL	(0°-30°)	230.6	4.1	B1/500		
BM	(30°-60°)	1223.5	21.9	B2/2500		
BH	(60°-80°)	1325.4	23.7	B3/2500		G1/1800
BVH	(80°-90°)	18.6	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G1

Type V Short





REPORT NUMBER: P271201
 CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2
2.5°	560.6	560.6	561.4	561.0	560.0	558.9	557.8	556.9	556.2	555.5	554.9
5°	554.9	554.9	555.8	555.2	554.6	553.4	552.7	551.7	551.1	550.4	550.8
7.5°	547.2	548.0	548.7	548.3	547.0	546.6	545.6	545.2	544.6	543.6	543.8
10°	540.8	541.0	541.8	541.5	541.0	540.2	539.7	539.4	539.1	537.6	537.4
12.5°	534.2	534.9	535.6	536.0	535.6	536.0	536.3	536.6	536.3	535.6	535.6
15°	529.1	529.8	530.9	531.8	532.2	534.2	535.6	536.9	538.1	538.4	537.4
17.5°	526.3	527.5	528.8	530.9	532.5	534.9	537.4	539.4	541.0	541.5	540.4
20°	526.0	527.0	529.1	531.5	534.6	537.6	541.5	544.6	546.3	547.2	546.3
22.5°	528.5	529.8	532.5	535.6	539.4	543.6	548.3	551.7	555.2	556.5	555.5
25°	535.3	536.6	539.7	543.6	547.6	552.7	557.6	562.0	565.5	567.2	565.8
27.5°	549.8	550.0	553.4	557.6	562.3	566.8	572.9	575.0	577.8	579.4	577.8
30°	570.0	570.7	573.7	580.1	584.6	590.5	593.9	595.9	599.0	600.7	598.7
32.5°	600.7	601.4	604.2	610.4	614.5	618.9	623.1	624.4	627.5	629.5	627.1
35°	644.3	645.6	648.0	652.2	655.7	658.9	662.1	661.1	663.0	665.9	663.5
37.5°	703.9	703.6	704.2	707.3	710.7	712.9	717.7	715.2	717.2	719.6	718.4
40°	773.5	773.5	773.1	778.7	780.0	782.1	787.2	784.1	786.8	789.6	787.2
42.5°	852.6	854.0	855.7	860.1	863.9	864.6	867.0	865.6	869.1	871.4	869.1
45°	943.8	945.8	947.9	958.2	959.8	961.2	963.1	958.5	962.4	964.4	963.7
47.5°	1038.4	1042.2	1046.6	1057.2	1064.1	1067.1	1068.5	1063.5	1063.8	1066.8	1067.1
50°	1145.2	1149.4	1153.9	1165.9	1172.4	1177.9	1179.6	1173.7	1174.4	1176.8	1177.5
52.5°	1244.1	1248.9	1258.3	1274.4	1283.8	1293.4	1294.1	1286.8	1290.0	1291.7	1290.2
55°	1336.9	1343.1	1355.7	1377.3	1394.1	1412.9	1421.5	1413.7	1413.7	1412.2	1411.5
57.5°	1445.2	1452.0	1465.0	1490.1	1513.4	1540.5	1563.7	1571.7	1586.0	1590.8	1583.3
60°	1608.2	1615.5	1628.8	1661.8	1691.1	1730.7	1769.0	1800.3	1850.9	1878.4	1853.7
62.5°	1757.4	1768.4	1799.8	1857.4	1921.1	1994.1	2078.8	2139.1	2231.3	2277.3	2215.2
65°	1723.5	1745.8	1807.4	1897.8	2029.5	2187.8	2360.1	2525.8	2716.2	2813.9	2687.8
67.5°	1505.5	1524.3	1590.8	1696.0	1860.2	2078.5	2346.5	2689.2	3082.3	3265.2	3042.1
68°	1422.1	1457.5	1523.6	1628.2	1793.6	2008.3	2294.5	2664.6	3093.6	3291.3	3050.4
70°	1090.5	1103.2	1166.5	1260.4	1438.9	1649.4	1938.4	2360.1	2845.1	3048.7	2800.8
72.5°	518.1	525.7	566.8	659.4	772.8	944.2	1199.1	1596.9	2033.9	2245.8	1998.5
75°	189.8	191.6	201.2	223.0	265.5	329.9	452.3	699.8	1035.9	1235.3	1040.1
77.5°	102.4	102.8	106.5	112.1	119.7	128.2	146.7	196.6	317.3	431.7	335.2
80°	64.4	64.0	67.8	72.4	77.4	81.6	83.3	89.1	100.4	117.6	107.9
82.5°	32.9	36.0	44.6	49.3	57.0	58.3	56.6	56.2	59.6	64.4	66.5
85°	18.1	16.1	23.6	31.5	34.2	35.4	35.7	33.5	32.9	32.2	34.0
87.5°	9.3	8.5	10.3	15.8	16.8	13.7	14.1	11.9	8.3	8.3	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271201

CATALOG NUMBER: XNV-AF-01-LED-U-5MQ-7027

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	558.2	558.2	558.2	558.2	558.2	558.2	558.2	558.2
2.5°	554.2	554.6	553.9	553.9	553.9	554.2	553.9	553.4
5°	549.8	550.4	550.4	550.8	551.1	551.1	551.1	551.1
7.5°	543.1	543.6	544.3	544.3	544.3	544.3	544.3	544.3
10°	536.9	536.3	536.0	535.3	535.3	534.2	534.6	534.9
12.5°	534.0	532.5	531.8	530.9	530.2	529.1	529.1	529.6
15°	535.3	533.2	531.2	530.4	529.8	529.1	528.5	528.8
17.5°	538.1	535.6	533.2	531.8	530.4	529.6	529.1	529.6
20°	543.8	540.4	536.6	534.2	531.5	530.9	529.8	530.9
22.5°	551.7	547.6	542.8	538.4	535.3	534.0	532.5	533.7
25°	561.4	556.9	552.1	547.0	543.6	542.4	540.8	540.8
27.5°	574.7	571.0	566.8	562.0	558.6	557.6	554.9	554.9
30°	595.9	592.3	588.4	584.3	580.8	579.9	576.4	576.4
32.5°	624.1	619.9	617.6	614.1	611.3	609.7	605.5	605.2
35°	661.7	658.0	657.6	655.3	652.4	652.9	648.8	648.0
37.5°	715.9	712.9	713.9	711.7	709.4	711.5	709.0	709.0
40°	785.1	784.1	785.1	783.7	784.1	784.4	782.3	783.1
42.5°	868.8	866.0	872.2	871.4	870.5	873.2	868.4	865.0
45°	965.0	964.1	970.2	971.2	969.1	970.9	962.4	961.9
47.5°	1069.5	1069.5	1075.0	1074.4	1072.2	1072.7	1062.3	1055.9
50°	1178.5	1177.9	1183.3	1182.0	1179.3	1178.8	1168.2	1161.8
52.5°	1292.0	1292.0	1299.8	1296.1	1289.5	1286.6	1273.4	1265.0
55°	1417.4	1415.6	1418.1	1405.8	1393.1	1383.7	1367.7	1361.2
57.5°	1576.0	1556.3	1539.1	1523.3	1505.5	1494.5	1475.6	1468.8
60°	1801.2	1748.1	1725.1	1693.7	1664.2	1649.4	1624.3	1611.0
62.5°	2113.2	2025.0	1962.6	1893.1	1826.0	1778.6	1740.6	1723.8
65°	2473.7	2281.7	2123.1	1973.9	1847.5	1747.1	1691.1	1673.7
67.5°	2610.7	2258.3	1984.5	1770.6	1617.2	1497.7	1430.8	1416.7
68°	2581.5	2204.9	1920.4	1701.5	1547.3	1426.7	1360.2	1347.5
70°	2277.3	1860.2	1559.9	1342.0	1198.1	1083.3	1036.4	1016.2
72.5°	1552.5	1194.7	916.5	733.0	625.4	552.7	509.6	494.8
75°	714.5	482.8	322.5	240.9	204.6	187.0	173.7	170.3
77.5°	208.3	151.5	130.3	120.6	113.5	107.3	102.8	102.4
80°	99.1	92.9	90.1	83.9	77.4	71.7	67.6	68.2
82.5°	66.5	64.8	64.8	58.6	48.2	41.4	34.2	30.8
85°	35.4	36.7	38.7	36.7	31.9	23.6	15.5	16.8
87.5°	11.9	13.7	14.5	14.1	12.7	9.6	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)