

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: P198691

Luminaire Tested: **XNV2-AF-02-LED-U-SL2-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198691
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-SL2-600-HSS
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6630.8 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

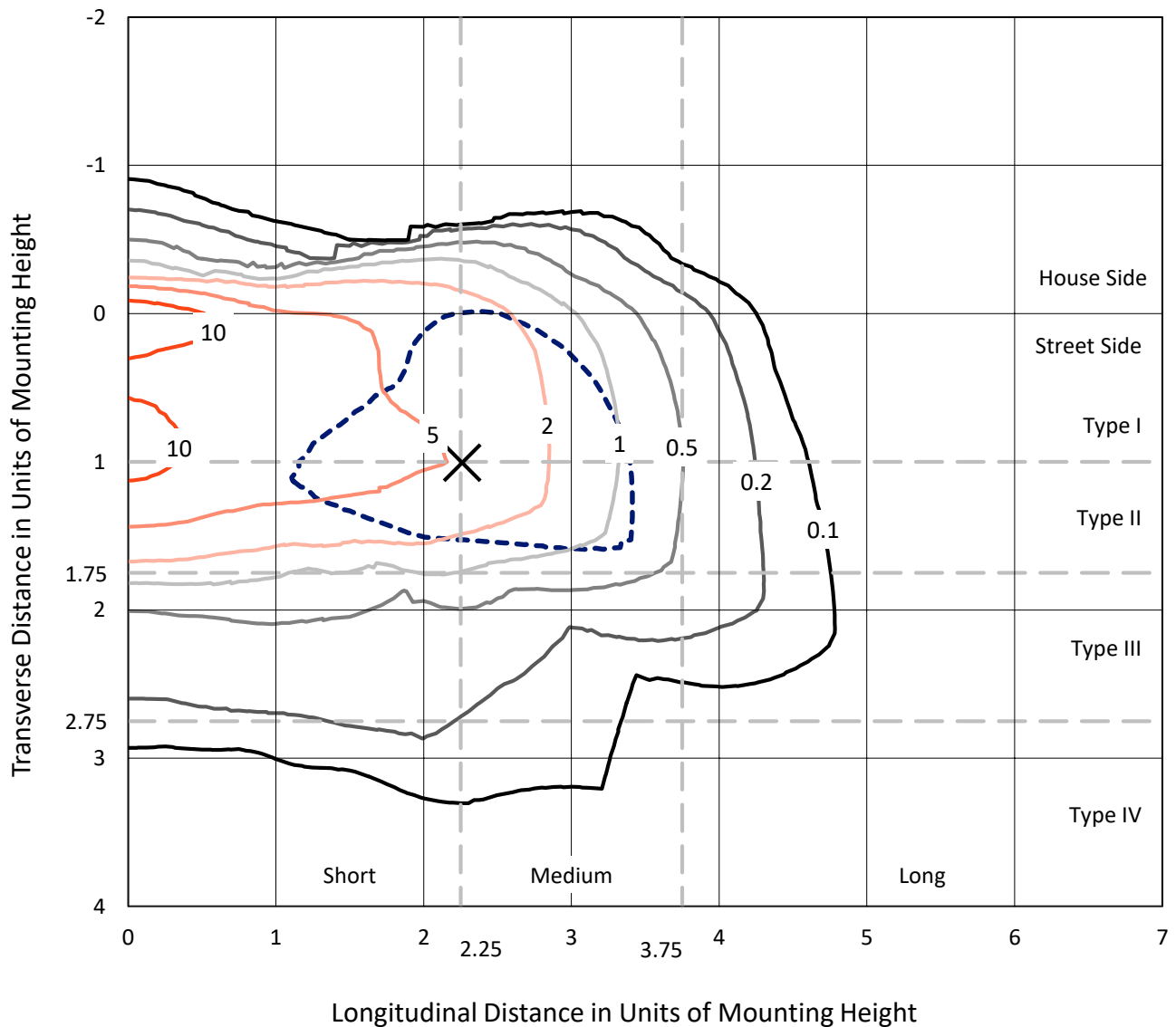
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198691
 CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-600-HSS

Iso-Footcandle Lines of Horizontal Illumination

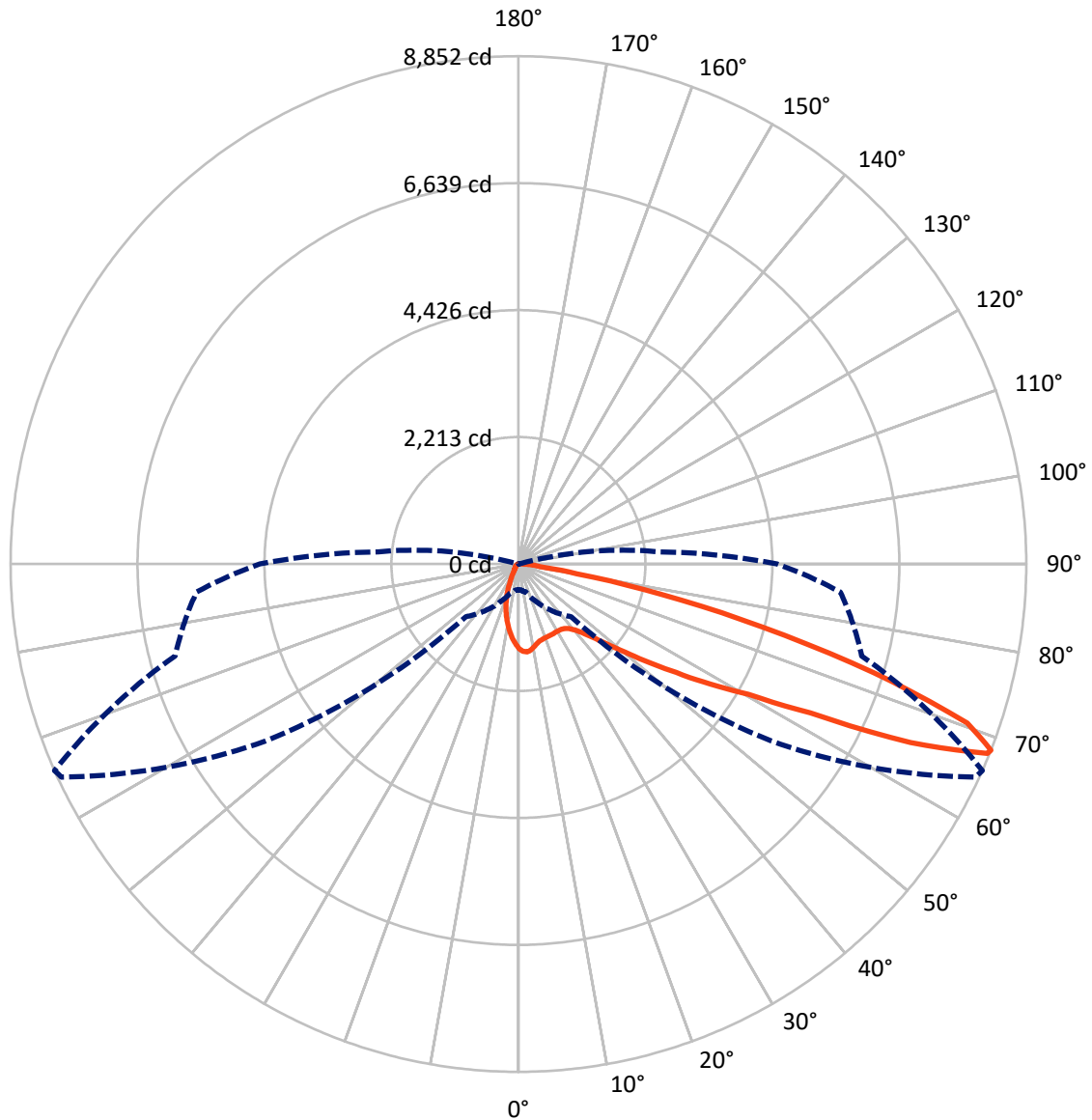
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
 Type II - Medium - Semi-Cutoff

REPORT NUMBER: P198691
CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-600-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

REPORT NUMBER: P198691

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-600-HSS

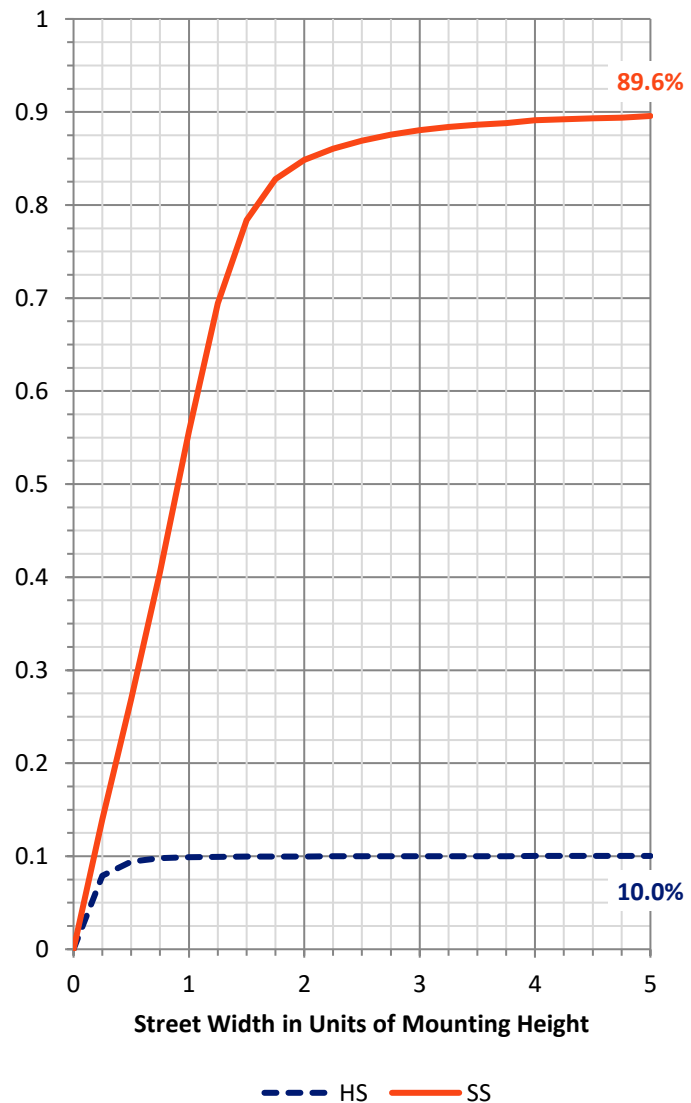
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	671.6	0.0	671.6
	% Fixture	10.1	0.0	10.1
Street Side	Lumens	5959.1	0.0	5959.1
	% Fixture	89.9	0.0	89.9
Total	Lumens	6630.8	0.0	6630.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	1.8
10°-20°	260.6	3.9
20°-30°	377.6	5.7
30°-40°	578.0	8.7
40°-50°	988.7	14.9
50°-60°	1546.6	23.3
60°-70°	1780.8	26.9
70°-80°	891.2	13.4
80°-90°	86.3	1.3
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°	6630.8	100.0
0°-180°	6630.8	100.0

Coefficient of Utilization



REPORT NUMBER: P198691

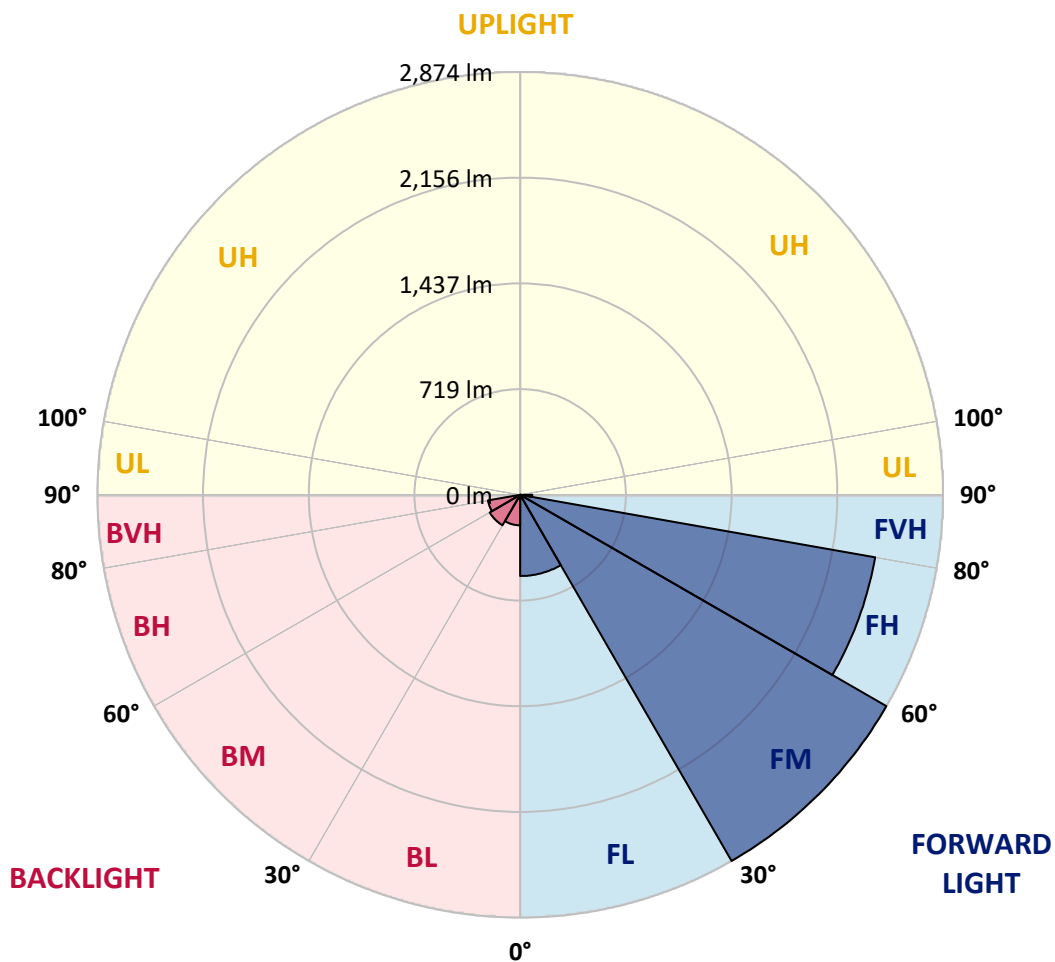
CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-600-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	552.0	8.3			
FM	(30°-60°)	2874.1	43.3			
FH	(60°-80°)	2450.1	36.9			G2/5000
FVH	(80°-90°)	83.0	1.3			G1/100
BL	(0°-30°)	207.3	3.1	B1/500		
BM	(30°-60°)	239.2	3.6	B1/1000		
BH	(60°-80°)	221.9	3.3	B1/500		G1/500
BVH	(80°-90°)	3.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium





REPORT NUMBER: P198691

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-600-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2
2.5°	1553.8	1554.8	1554.3	1555.9	1554.8	1547.0	1538.7	1521.0	1522.6	1499.6	1474.2
5°	1444.5	1453.3	1462.2	1471.0	1492.4	1511.1	1533.5	1538.7	1538.7	1518.9	1481.4
7.5°	1333.1	1333.6	1343.5	1355.5	1384.1	1418.4	1470.5	1517.3	1518.4	1523.6	1482.5
10°	1249.3	1251.9	1258.6	1271.6	1300.3	1334.1	1392.4	1465.8	1471.5	1510.1	1472.0
12.5°	1184.2	1187.3	1194.6	1209.7	1235.7	1270.6	1332.1	1415.9	1423.6	1497.1	1469.0
15°	1134.2	1138.4	1144.2	1159.2	1187.3	1224.3	1291.5	1382.5	1391.9	1491.9	1478.9
17.5°	1113.4	1113.4	1112.9	1123.3	1151.4	1188.9	1259.2	1364.8	1376.8	1496.0	1495.5
20°	1122.3	1120.7	1109.8	1107.1	1124.3	1161.9	1233.7	1353.4	1367.0	1503.8	1515.8
22.5°	1169.1	1166.0	1141.5	1121.3	1116.0	1141.0	1216.5	1345.6	1361.8	1520.0	1542.8
25°	1268.6	1259.2	1225.3	1179.6	1138.4	1135.8	1204.5	1341.4	1358.6	1538.7	1572.5
27.5°	1397.7	1395.0	1340.9	1279.5	1200.3	1153.0	1200.8	1338.3	1355.5	1552.2	1596.5
30°	1558.0	1559.0	1496.6	1416.4	1296.7	1201.4	1212.3	1336.7	1354.4	1553.2	1606.9
32.5°	1723.5	1724.5	1672.4	1586.6	1428.3	1284.7	1244.6	1344.1	1360.1	1549.2	1606.3
35°	1882.7	1884.4	1853.1	1783.8	1604.3	1400.2	1305.5	1369.0	1380.5	1551.7	1605.3
37.5°	2084.3	2090.5	2051.9	1987.4	1824.9	1569.9	1404.9	1419.4	1428.9	1573.1	1613.1
40°	2427.8	2419.5	2309.1	2199.8	2064.4	1776.6	1548.5	1506.4	1509.6	1628.2	1642.8
42.5°	2828.0	2817.6	2628.7	2440.2	2310.6	2026.0	1732.4	1639.7	1639.2	1720.9	1707.3
45°	3172.7	3166.4	2967.6	2716.1	2583.4	2301.2	1958.7	1831.8	1825.6	1881.2	1824.9
47.5°	3417.3	3412.1	3261.7	3009.7	2898.8	2604.2	2241.4	2093.6	2080.6	2091.0	2016.0
50°	3441.2	3435.5	3382.9	3221.1	3267.4	3048.8	2590.7	2436.6	2420.0	2403.8	2304.9
52.5°	3217.4	3216.9	3244.5	3234.1	3525.6	3620.8	3019.1	2860.9	2841.0	2799.9	2701.6
55°	2759.8	2757.3	2861.9	3013.9	3519.9	4211.1	3672.4	3365.8	3339.7	3257.5	3128.4
57.5°	2016.5	2003.0	2221.6	2543.9	3272.6	4469.3	4709.8	3993.0	3949.8	3689.0	3490.2
60°	1113.4	1118.6	1399.7	1781.3	2687.0	4418.3	5664.5	4724.4	4610.8	4061.2	3860.8
62.5°	624.1	637.1	846.4	1157.7	1713.0	4004.4	6176.7	5983.0	5709.7	4495.4	4329.2
65°	472.1	480.0	585.1	893.2	1080.1	2798.4	6258.4	7742.9	7507.1	5153.3	5075.2
67.5°	444.6	450.8	502.3	740.7	983.8	1451.3	5643.1	8784.0	8813.6	6050.7	5653.0
68°	447.6	455.4	507.0	712.6	982.2	1298.2	5380.7	8789.2	8852.2	6195.4	5633.2
70°	411.2	413.3	536.1	699.1	952.1	1022.8	3892.5	8187.0	8299.9	6367.7	5113.7
72.5°	157.2	157.7	240.5	605.4	997.4	1028.6	1960.9	6470.8	6476.5	5541.6	3986.7
75°	81.7	68.7	75.5	189.5	952.6	1002.6	983.8	4418.3	4390.7	3747.9	2442.9
77.5°	56.3	47.9	50.5	65.6	396.1	1002.0	710.5	2540.7	2535.0	1594.4	697.0
80°	31.7	27.6	30.2	55.1	139.0	940.6	662.2	1092.1	1029.1	280.1	112.9
82.5°	16.2	13.5	16.2	46.3	86.4	591.9	643.9	428.4	381.6	66.6	73.3
85°	4.2	4.2	7.8	32.2	53.6	194.2	577.3	309.2	277.9	29.2	52.1
87.5°	1.0	0.5	3.2	12.0	19.2	42.1	320.1	172.3	148.3	15.1	30.2
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: P198691

CATALOG NUMBER: XNV2-AF-02-LED-U-SL2-600-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2	1477.2
2.5°	1463.7	1449.2	1420.6	1388.2	1365.3	1340.4	1325.8	1308.1	1294.5	1282.6	1291.5
5°	1458.5	1430.4	1367.0	1295.6	1235.7	1178.4	1135.8	1095.2	1064.5	1045.3	1053.0
7.5°	1445.0	1403.4	1300.3	1188.9	1091.1	998.9	923.9	856.8	804.8	776.6	785.5
10°	1422.1	1363.3	1224.8	1070.2	933.3	803.2	691.8	591.9	516.4	481.0	489.3
12.5°	1405.4	1327.9	1146.7	955.7	775.6	590.8	442.9	328.5	269.6	234.3	237.3
15°	1398.2	1300.3	1073.9	834.9	603.3	379.5	239.5	173.3	153.0	145.8	146.3
17.5°	1399.2	1278.4	1004.6	709.5	429.4	218.1	146.8	132.2	129.1	127.6	127.6
20°	1401.7	1256.6	932.8	578.8	274.9	140.6	122.3	117.6	116.1	114.0	114.5
22.5°	1409.6	1239.9	860.4	447.6	169.2	114.5	108.2	104.1	101.5	98.4	98.9
25°	1421.6	1227.4	789.1	322.2	119.2	99.9	94.2	88.5	83.8	80.2	80.7
27.5°	1428.9	1209.7	713.1	219.6	98.9	87.5	79.7	71.8	66.6	63.5	63.0
30°	1423.6	1181.1	626.8	144.2	87.5	75.5	66.1	57.3	52.1	49.4	49.4
32.5°	1409.6	1144.2	531.4	105.2	77.5	65.1	53.6	45.8	42.1	40.6	41.1
35°	1393.5	1105.6	429.9	89.0	69.8	55.1	43.7	37.4	35.9	35.4	35.4
37.5°	1384.7	1072.3	332.7	80.7	62.5	45.8	35.9	32.2	30.7	30.7	30.7
40°	1394.5	1046.8	246.2	74.5	55.1	38.0	30.2	27.6	27.1	27.1	27.1
42.5°	1436.6	1038.0	180.1	69.3	47.9	31.7	26.0	23.9	23.4	23.9	23.9
45°	1518.9	1057.2	136.4	64.0	41.1	26.0	22.4	20.9	20.9	21.4	21.4
47.5°	1658.4	1106.6	111.9	58.8	34.4	21.9	19.2	18.2	18.2	18.7	18.7
50°	1875.0	1198.3	100.5	53.1	28.6	18.7	16.2	15.7	15.7	16.2	16.7
52.5°	2203.9	1372.6	94.7	47.4	23.4	15.7	13.5	13.0	13.5	14.0	14.0
55°	2569.9	1595.9	88.0	41.6	19.7	13.0	10.9	10.9	11.5	12.5	12.5
57.5°	2910.8	1811.4	81.7	34.4	17.2	10.4	8.9	8.9	9.9	10.9	10.9
60°	3271.0	2022.8	73.3	27.6	14.5	8.3	7.3	7.3	8.9	9.9	10.4
62.5°	3716.1	2268.5	62.5	21.9	11.5	6.2	5.2	6.8	8.3	9.9	9.9
65°	4359.5	2574.1	48.9	17.2	8.9	4.7	4.2	6.2	7.8	9.4	9.9
67.5°	4593.2	2535.0	36.9	14.0	6.8	3.7	3.7	5.7	7.8	9.4	9.4
68°	4507.8	2449.7	35.4	13.5	6.2	3.7	3.7	5.7	7.8	9.4	9.4
70°	3927.9	2002.5	29.2	10.4	5.2	3.2	3.2	5.2	7.8	8.9	9.4
72.5°	2941.0	1330.4	25.0	6.8	4.7	3.2	2.6	5.2	7.3	8.9	8.9
75°	1687.1	552.3	21.4	5.2	4.2	2.6	2.6	4.7	7.3	8.9	8.9
77.5°	476.8	129.1	17.2	4.2	3.7	2.6	2.0	4.7	6.8	8.3	8.3
80°	87.5	38.6	13.5	3.7	3.2	2.6	2.0	4.7	6.8	8.3	8.3
82.5°	57.8	18.2	9.9	3.7	3.2	2.6	2.0	4.2	6.2	7.8	7.8
85°	43.2	13.0	6.2	3.7	3.2	2.6	2.0	4.2	6.2	7.8	7.8
87.5°	23.9	5.7	4.7	4.2	3.7	2.6	2.0	3.7	5.7	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)