

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: P198789

Luminaire Tested: **XNV2-AF-02-LED-U-T4FT-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198789
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24256)
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-T4FT-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10045.4 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

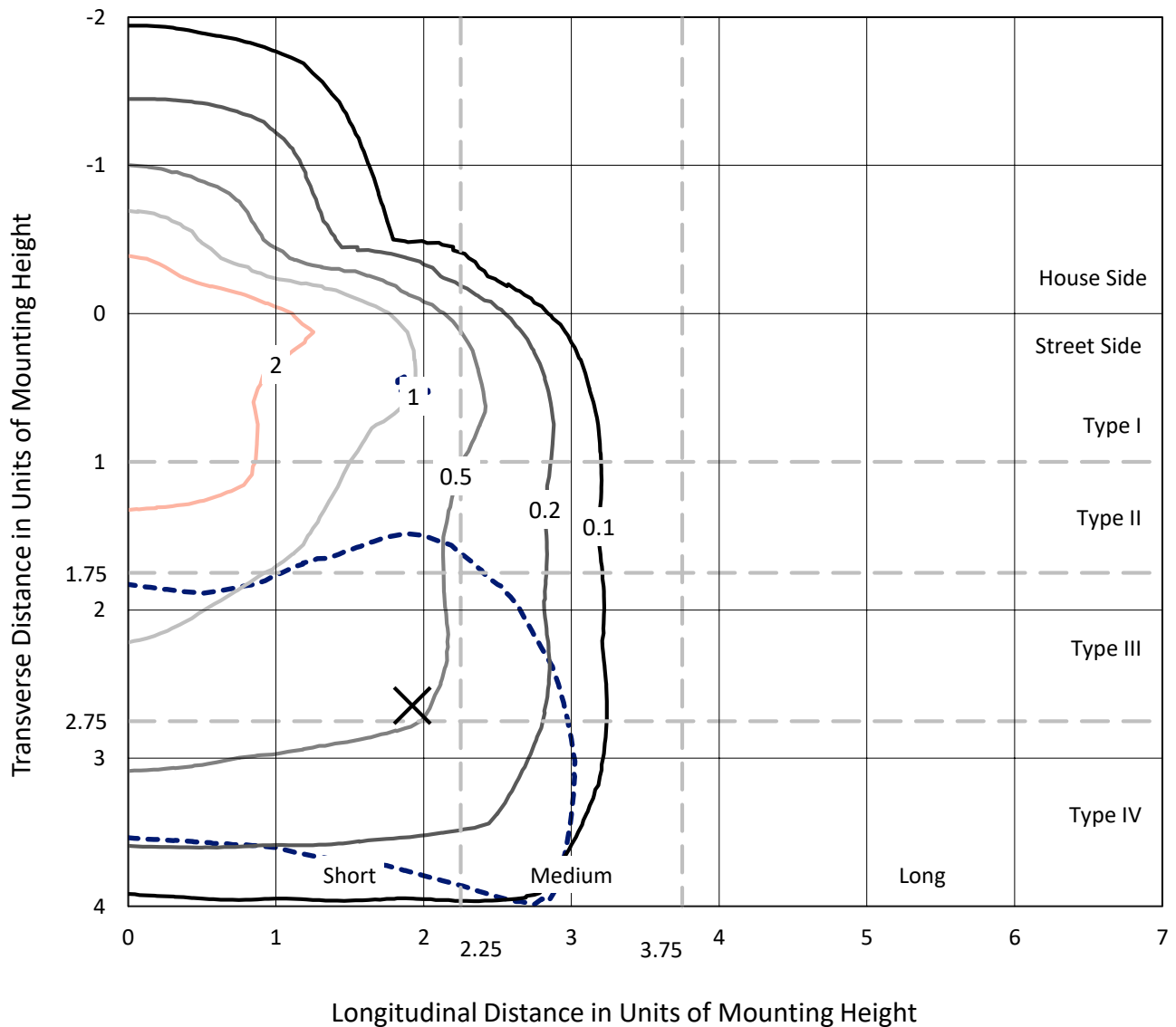
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

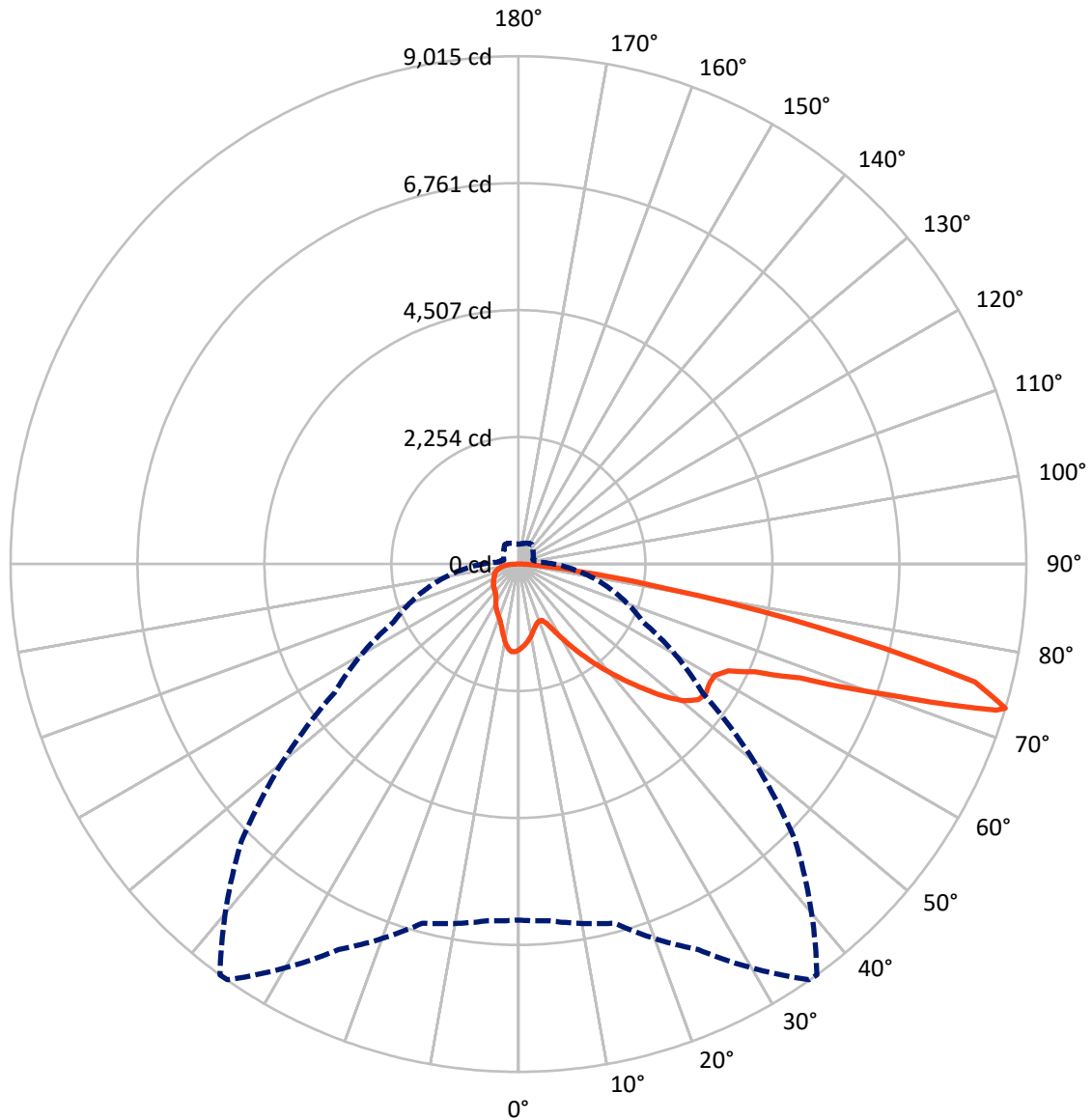
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1937.1	0.0	1937.1
	% Fixture	19.3	0.0	19.3
Street Side	Lumens	8108.3	0.0	8108.3
	% Fixture	80.7	0.0	80.7
Total	Lumens	10045.4	0.0	10045.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.2	1.4
10°-20°	347.1	3.5
20°-30°	556.5	5.5
30°-40°	920.5	9.2
40°-50°	1424.4	14.2
50°-60°	1906.8	19.0
60°-70°	2490.9	24.8
70°-80°	2034.6	20.3
80°-90°	226.5	2.3
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°	10045.4	100.0
0°-180°	10045.4	100.0



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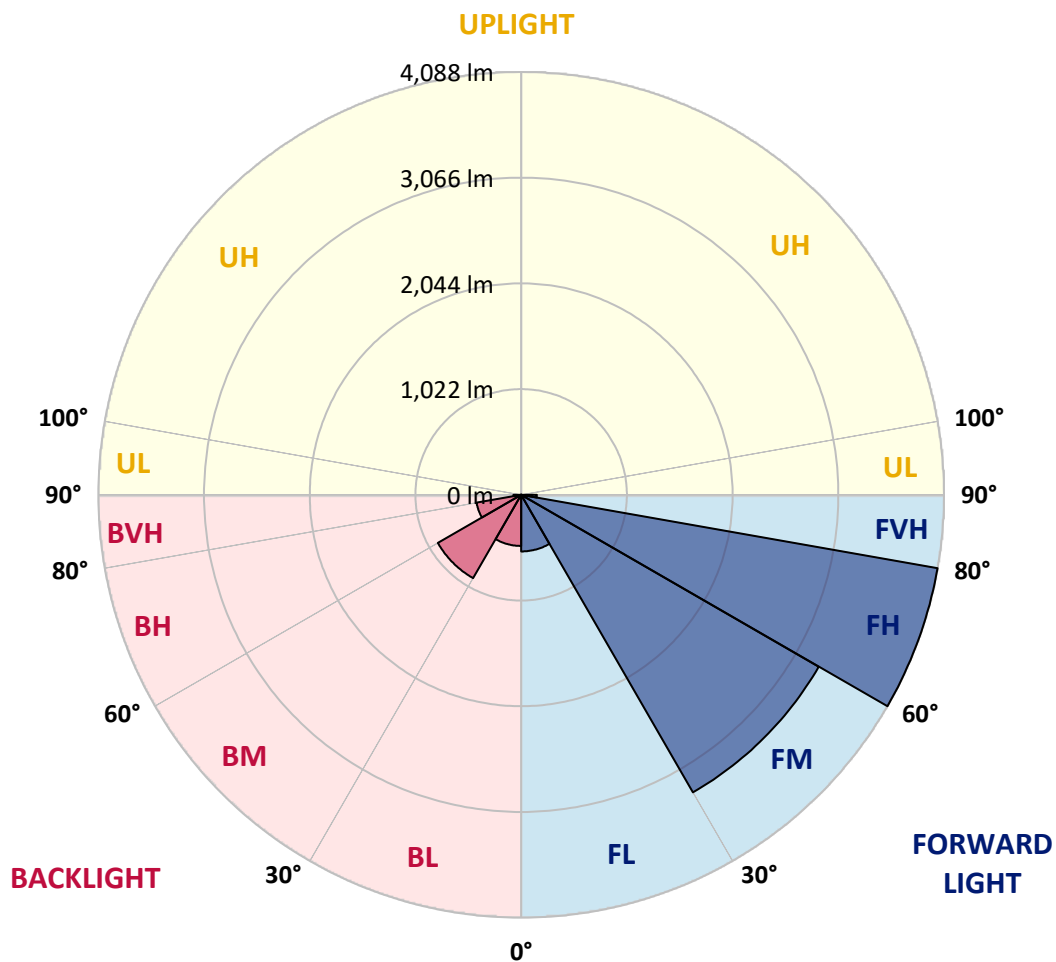
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	547.4	5.4			
FM	(30°-60°)	3321.4	33.1			
FH	(60°-80°)	4087.7	40.7			G2/5000
FVH	(80°-90°)	151.9	1.5			G2/225
BL	(0°-30°)	494.5	4.9	B1/500		
BM	(30°-60°)	930.3	9.3	B1/1000		
BH	(60°-80°)	437.7	4.4	B1/500		G1/500
BVH	(80°-90°)	74.6	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5
2.5°	1463.5	1467.3	1467.9	1472.4	1472.4	1471.8	1473.7	1481.3	1485.2	1494.1	1501.8
5°	1391.4	1395.8	1397.8	1405.4	1414.9	1415.7	1422.6	1437.3	1451.4	1471.2	1487.8
7.5°	1310.3	1315.4	1320.5	1336.5	1350.5	1351.8	1365.2	1388.9	1407.4	1431.6	1461.6
10°	1231.8	1233.1	1238.2	1258.6	1277.2	1279.1	1298.2	1325.0	1349.9	1383.7	1417.5
12.5°	1167.4	1171.2	1169.9	1185.2	1201.1	1202.5	1228.0	1261.8	1298.2	1336.5	1376.7
15°	1145.0	1144.4	1131.0	1130.4	1137.3	1138.6	1163.5	1203.1	1243.9	1291.2	1342.8
17.5°	1160.3	1155.2	1120.1	1098.4	1093.9	1095.3	1113.8	1157.2	1200.5	1254.8	1316.7
20°	1244.6	1224.8	1142.4	1090.2	1075.4	1075.4	1086.3	1121.4	1169.2	1232.5	1310.3
22.5°	1444.3	1413.7	1238.2	1145.0	1093.3	1088.2	1079.9	1106.7	1159.7	1235.6	1336.5
25°	1695.8	1681.1	1413.7	1291.2	1184.6	1168.0	1113.1	1122.7	1179.5	1270.1	1408.0
27.5°	1928.8	1903.3	1644.1	1503.7	1353.1	1327.6	1211.4	1172.5	1226.7	1333.9	1511.4
30°	2064.7	2047.5	1880.9	1746.9	1567.6	1534.9	1368.4	1270.7	1310.9	1439.3	1658.2
32.5°	2212.8	2202.6	2118.3	1996.4	1799.9	1762.2	1571.4	1430.9	1439.9	1579.0	1835.0
35°	2356.4	2369.8	2322.0	2232.6	2050.1	2014.9	1843.9	1640.3	1598.8	1736.0	2023.9
37.5°	2528.7	2531.9	2501.9	2443.8	2313.0	2284.2	2143.3	1863.7	1771.8	1903.3	2206.4
40°	2872.8	2822.3	2704.9	2659.0	2581.1	2563.2	2402.4	2068.6	1932.7	2075.0	2378.8
42.5°	3244.9	3166.3	2982.5	2907.2	2875.9	2859.4	2618.1	2205.2	2083.2	2246.6	2547.9
45°	3544.8	3481.0	3301.1	3207.9	3211.7	3184.9	2806.4	2327.0	2246.6	2419.0	2736.8
47.5°	3840.4	3733.8	3532.0	3518.6	3563.3	3523.8	2986.4	2448.9	2417.0	2606.6	2925.7
50°	3859.5	3762.5	3680.8	3788.0	3864.6	3815.4	3149.8	2608.5	2593.8	2833.8	3169.5
52.5°	3626.6	3612.4	3736.9	3917.6	4044.5	4000.6	3283.2	2772.5	2774.4	3117.9	3466.4
55°	3541.7	3523.8	3673.1	3895.2	4066.9	4040.8	3382.7	2957.7	2974.8	3462.5	3784.8
57.5°	3684.6	3640.0	3669.3	3853.1	4014.6	3999.2	3486.1	3163.2	3194.5	3859.5	4079.0
60°	4128.2	4036.9	3881.2	3915.7	4016.5	4007.5	3634.1	3392.3	3444.6	4273.1	4265.4
62.5°	4792.6	4689.2	4372.0	4218.9	4196.5	4179.3	3878.6	3673.7	3699.9	4571.8	4156.9
65°	5521.5	5410.4	5033.2	4782.4	4650.9	4613.9	4273.1	4013.3	3849.3	4571.2	3734.4
67.5°	6339.7	6222.3	5846.4	5607.0	5464.7	5401.5	4913.2	4287.7	3800.8	4184.4	2988.2
70°	7177.7	7066.0	6893.7	6977.3	7039.8	6943.5	5921.7	4379.0	3452.3	3280.6	2006.6
72.5°	6732.9	6724.0	6854.8	7647.5	8853.1	8872.3	6928.9	4121.2	2667.2	1949.8	1069.7
73°	6319.9	6357.5	6600.1	7548.6	9008.2	9014.7	6948.6	3987.8	2448.9	1679.9	939.5
75°	3274.3	3529.5	4429.5	6120.8	8341.2	8371.2	6125.2	3018.9	1459.6	933.1	633.1
77.5°	877.0	865.4	1427.1	2981.9	5561.1	5521.5	3870.3	1461.6	699.5	585.2	444.3
80°	300.6	304.4	485.7	1090.8	2595.7	2688.3	1679.9	637.6	460.2	407.9	314.7
82.5°	153.1	158.3	254.0	464.0	1085.7	1062.6	540.6	375.3	308.3	247.7	176.2
85°	81.7	84.3	139.7	240.6	398.2	402.7	190.2	200.4	195.9	140.5	86.8
87.5°	40.2	41.5	67.0	106.0	147.4	142.3	66.4	86.8	96.4	79.2	47.9
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5	1521.5
2.5°	1511.4	1511.4	1519.7	1533.7	1543.9	1553.5	1559.9	1570.1	1575.9	1575.2	1574.5
5°	1501.2	1507.5	1524.1	1541.4	1552.8	1560.5	1560.5	1565.0	1565.0	1563.1	1560.5
7.5°	1477.6	1488.4	1512.6	1528.0	1531.2	1522.9	1506.3	1493.5	1477.6	1469.3	1466.1
10°	1439.9	1453.9	1484.6	1491.6	1475.0	1445.6	1405.4	1371.0	1340.3	1326.3	1321.9
12.5°	1402.9	1421.4	1450.1	1439.3	1399.7	1342.2	1280.3	1233.1	1198.6	1185.2	1180.8
15°	1372.2	1394.6	1416.9	1383.1	1314.2	1234.4	1166.1	1122.1	1095.9	1085.7	1083.1
17.5°	1351.8	1378.0	1385.6	1322.5	1226.7	1137.3	1076.8	1048.0	1036.6	1032.1	1030.7
20°	1353.1	1382.4	1363.9	1263.8	1142.4	1052.5	1012.2	1003.9	1003.9	1003.9	1003.3
22.5°	1388.1	1413.7	1355.0	1208.8	1061.4	981.0	963.7	970.8	975.9	975.9	975.3
25°	1461.0	1475.0	1361.3	1155.8	985.4	919.1	919.7	933.1	937.6	937.6	936.3
27.5°	1572.0	1560.5	1372.9	1097.1	910.7	863.0	871.9	883.9	887.2	885.3	884.6
30°	1711.2	1665.2	1382.4	1028.2	840.6	810.6	818.3	825.2	822.7	818.3	817.6
32.5°	1866.9	1771.8	1376.7	951.0	778.7	756.4	760.8	764.7	760.8	749.9	749.9
35°	2021.4	1868.1	1345.4	866.7	729.5	704.0	703.4	715.5	714.8	702.1	702.7
37.5°	2156.7	1944.1	1284.8	789.5	687.4	665.7	668.3	675.9	679.8	662.5	660.6
40°	2274.7	1996.4	1199.3	723.7	653.6	654.9	647.8	635.7	631.3	623.6	622.3
42.5°	2385.7	2032.8	1108.7	668.9	636.4	651.0	627.4	598.6	586.6	593.6	598.0
45°	2494.9	2073.6	1021.2	623.6	614.6	639.5	607.0	575.1	561.0	564.3	568.7
47.5°	2628.3	2130.5	915.8	575.1	581.4	618.5	594.2	559.8	538.7	525.9	522.1
50°	2803.8	2212.8	779.3	522.7	546.4	595.5	583.4	537.4	514.4	488.9	482.5
52.5°	3023.3	2290.7	641.4	480.6	517.6	575.7	565.5	518.2	490.2	459.5	454.4
55°	3242.3	2301.5	522.7	444.3	485.1	548.9	543.8	503.0	463.4	438.4	433.3
57.5°	3395.5	2198.7	442.9	413.6	453.8	515.7	524.0	484.5	441.0	421.9	418.7
60°	3398.0	1953.0	394.4	393.1	430.2	487.0	503.6	462.7	427.0	414.2	411.6
62.5°	3128.1	1573.9	363.1	377.9	413.0	463.4	488.3	450.6	423.8	418.7	416.1
65°	2621.9	1162.9	338.3	363.8	397.0	443.6	475.5	446.7	422.5	420.6	418.7
67.5°	1935.8	797.2	317.2	346.0	379.1	423.2	463.4	441.0	414.9	422.5	419.9
70°	1217.8	532.3	297.5	325.5	355.5	399.6	447.4	430.9	405.3	400.8	392.5
72.5°	687.4	384.8	273.8	299.3	324.9	368.3	425.8	413.6	383.6	365.7	357.4
73°	621.0	364.5	268.0	293.0	317.8	361.9	420.6	408.5	377.2	357.4	349.7
75°	454.4	298.1	241.9	266.8	288.5	332.6	396.4	383.0	349.1	325.5	320.4
77.5°	329.3	229.8	208.1	230.4	249.6	291.6	360.0	344.6	311.5	298.7	293.6
80°	237.4	174.2	172.4	194.1	210.6	253.4	321.0	305.0	273.1	310.9	302.5
82.5°	141.7	111.7	126.3	150.6	167.9	212.6	279.0	260.4	229.8	232.3	197.8
85°	67.6	63.2	78.5	98.9	111.1	145.6	232.3	217.7	183.8	150.6	147.4
87.5°	30.0	28.7	37.6	44.1	59.3	87.5	159.0	141.1	133.4	79.8	62.5
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)