

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: P198893

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198893
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)
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-SL4-7050-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9294 lumens
Efficiency: N/A
Efficacy: 109.3 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 - G3

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

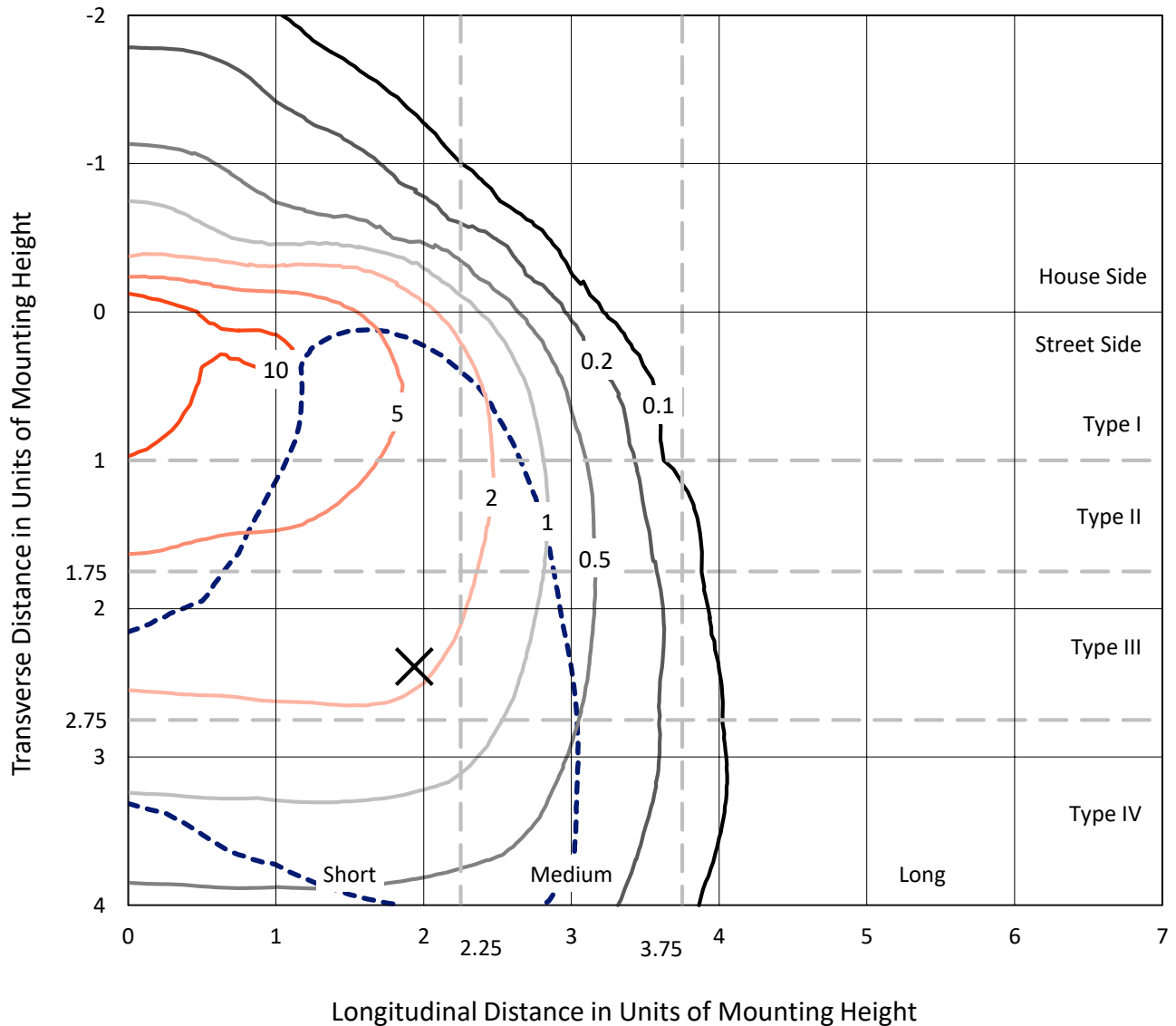


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

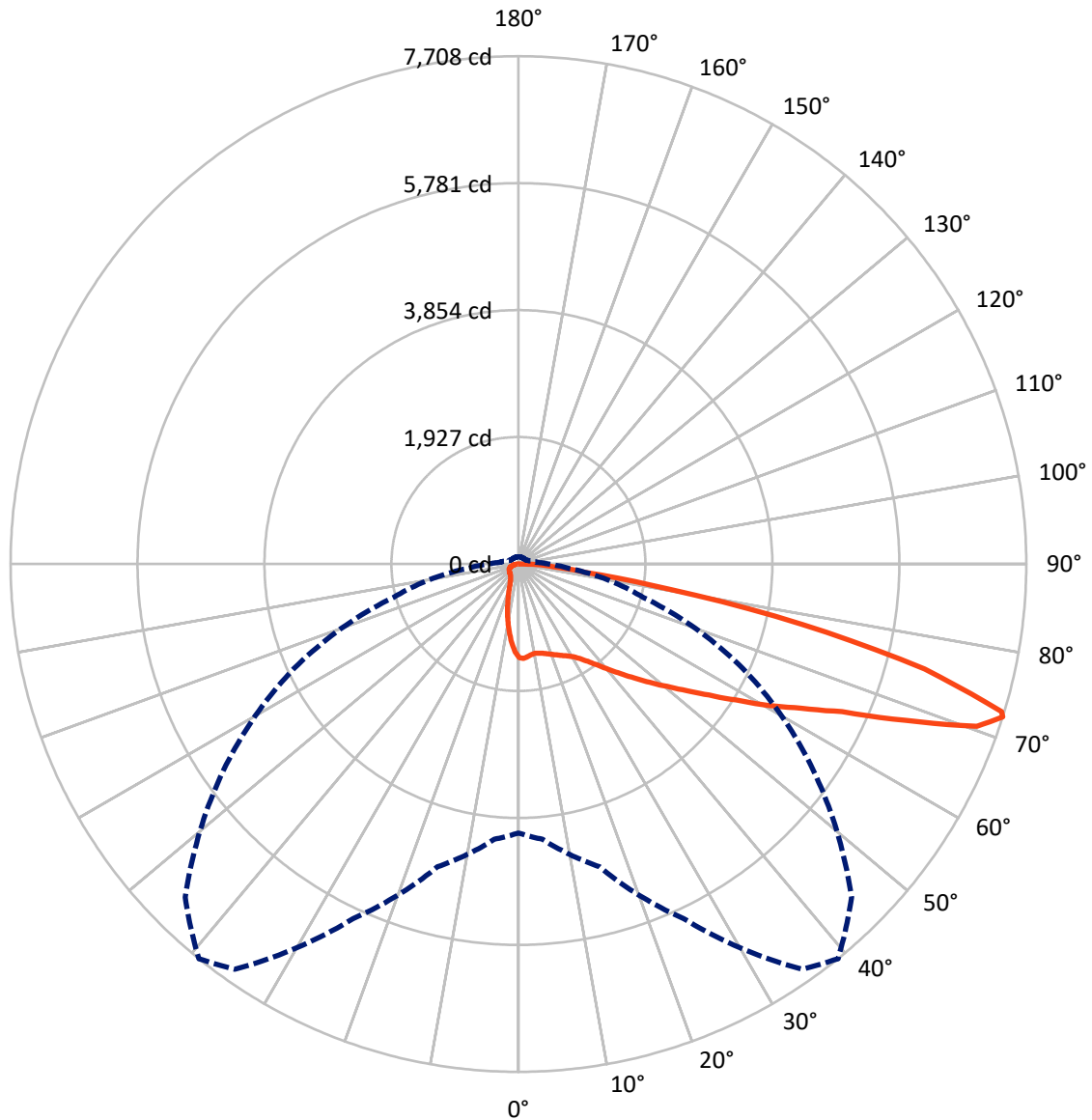


Based on 10 foot mounting height. Maximum calculated value = 14.2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 72-Deg Vertical

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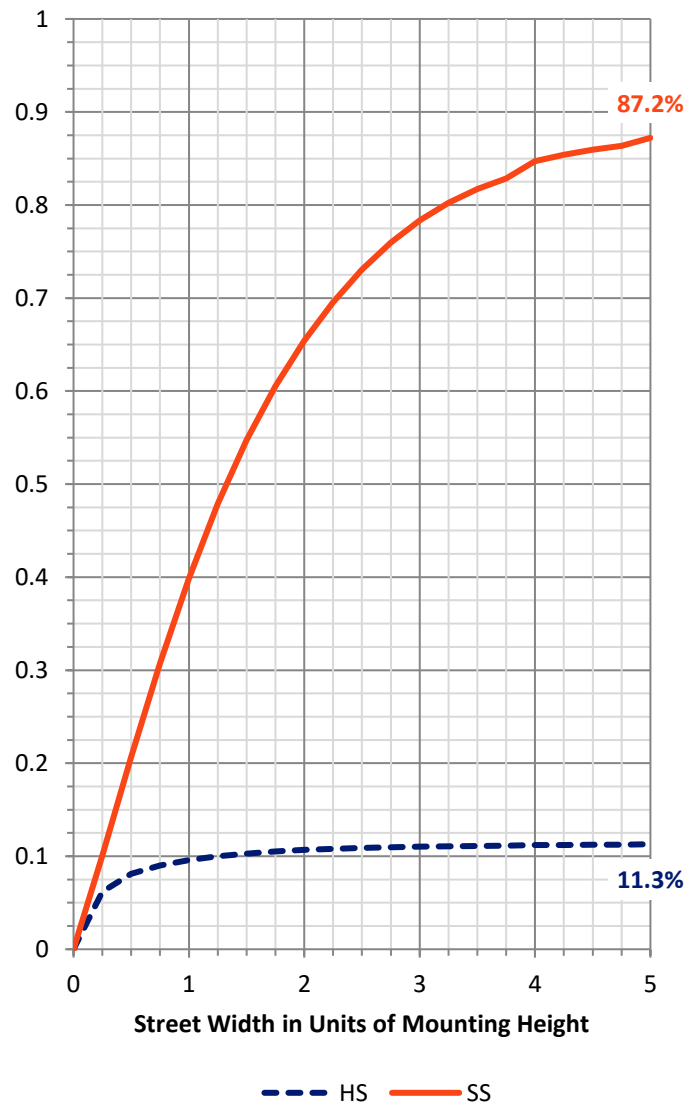
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1065.7	0.0	1065.7
	% Fixture	11.5	0.0	11.5
Street Side	Lumens	8228.3	0.0	8228.3
	% Fixture	88.5	0.0	88.5
Total	Lumens	9294.0	0.0	9294.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.0	1.3
10°-20°	306.5	3.3
20°-30°	477.6	5.1
30°-40°	735.4	7.9
40°-50°	1198.9	12.9
50°-60°	1862.9	20.0
60°-70°	2493.5	26.8
70°-80°	1793.2	19.3
80°-90°	304.0	3.3
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°	9294.0	100.0
0°-180°	9294.0	100.0



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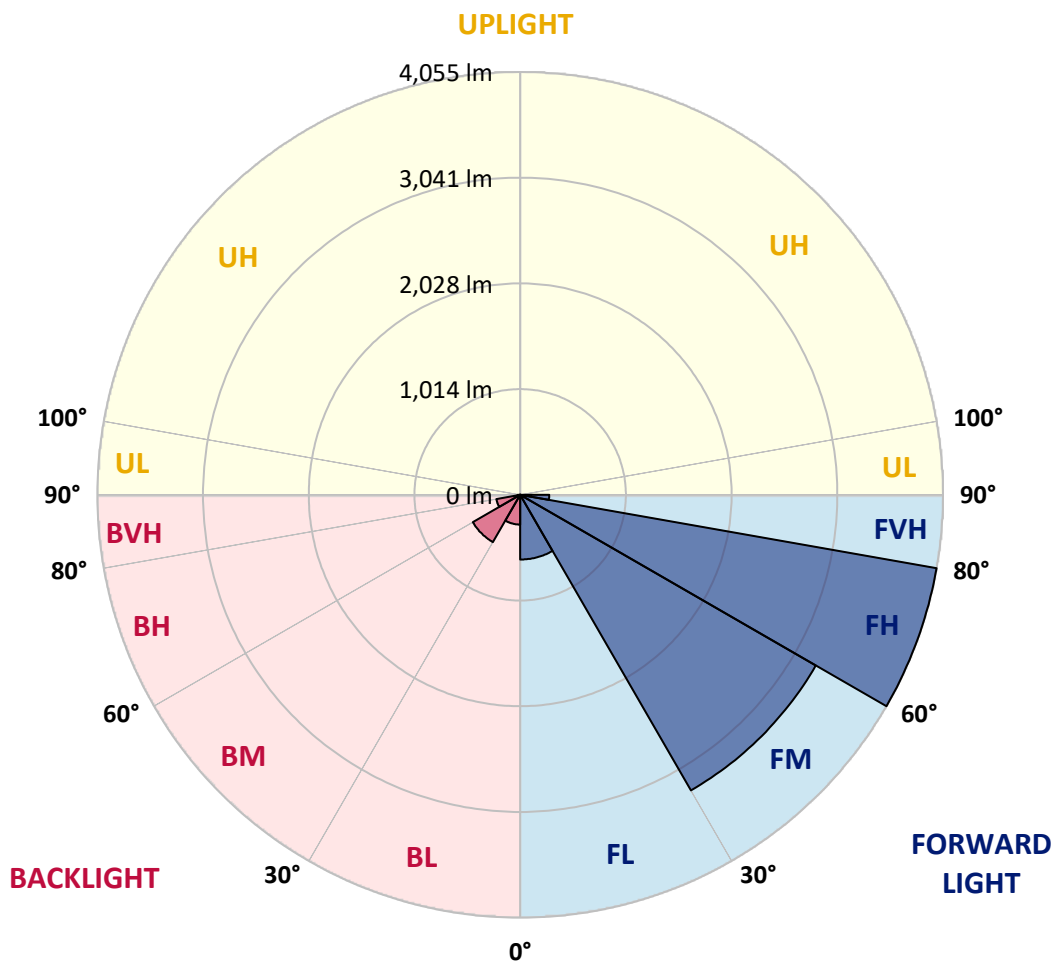
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	620.8	6.7			
FM	(30°-60°)	3273.5	35.2			
FH	(60°-80°)	4055.1	43.6			G2/5000
FVH	(80°-90°)	278.9	3.0			G3/500
BL	(0°-30°)	285.3	3.1	B1/500		
BM	(30°-60°)	523.7	5.6	B1/1000		
BH	(60°-80°)	231.5	2.5	B1/500		G1/500
BVH	(80°-90°)	25.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4
2.5°	1449.9	1450.6	1448.7	1443.1	1438.1	1435.6	1431.2	1423.7	1413.7	1406.9	1401.3
5°	1436.2	1438.1	1436.8	1427.5	1418.7	1413.7	1406.9	1396.3	1383.2	1377.6	1364.5
7.5°	1425.6	1426.8	1423.1	1412.5	1395.7	1389.4	1376.9	1363.2	1351.4	1343.2	1327.6
10°	1418.1	1419.4	1416.2	1405.6	1386.9	1379.4	1364.5	1349.5	1333.9	1323.9	1306.4
12.5°	1407.5	1410.0	1410.0	1405.0	1392.5	1387.5	1372.6	1356.3	1342.0	1331.4	1309.6
15°	1405.6	1408.8	1414.4	1413.7	1410.0	1406.3	1394.4	1378.2	1365.7	1353.2	1326.4
17.5°	1421.2	1428.1	1439.3	1443.1	1440.6	1432.5	1418.7	1403.8	1390.0	1378.2	1345.1
20°	1460.5	1464.3	1481.1	1488.6	1476.1	1464.3	1446.2	1426.8	1414.4	1405.0	1362.6
22.5°	1519.8	1524.8	1538.5	1539.1	1512.9	1498.6	1475.5	1451.8	1439.9	1436.2	1386.3
25°	1614.6	1613.4	1617.1	1601.5	1554.1	1537.3	1509.2	1481.8	1473.6	1481.1	1421.2
27.5°	1728.2	1725.1	1713.2	1672.7	1600.9	1579.1	1545.4	1521.1	1521.1	1538.5	1468.6
30°	1859.2	1856.1	1817.4	1749.4	1656.4	1631.5	1595.9	1570.3	1583.4	1617.1	1532.9
32.5°	1997.7	1986.5	1932.2	1841.1	1735.7	1708.2	1673.9	1647.7	1672.7	1730.1	1625.2
35°	2128.1	2121.9	2055.1	1947.2	1838.0	1814.9	1791.2	1758.8	1798.7	1887.9	1755.6
37.5°	2262.9	2257.9	2176.1	2061.3	1962.8	1947.2	1927.2	1904.8	1969.0	2086.3	1932.2
40°	2413.2	2403.2	2300.3	2185.5	2108.1	2100.7	2090.0	2083.8	2187.4	2362.1	2155.6
42.5°	2583.5	2564.2	2431.3	2322.1	2266.6	2272.8	2267.2	2292.2	2450.7	2680.3	2421.3
45°	2778.2	2739.5	2561.7	2467.5	2441.9	2466.9	2478.7	2542.4	2762.0	3047.7	2718.3
47.5°	2960.4	2910.5	2704.6	2625.3	2639.7	2682.7	2716.4	2828.7	3103.3	3410.8	3021.5
50°	3128.2	3072.1	2857.4	2788.8	2858.7	2919.8	2989.7	3148.2	3466.4	3784.5	3299.8
52.5°	3252.4	3211.8	3010.3	2967.2	3110.1	3191.2	3302.9	3503.2	3833.2	4140.8	3548.1
55°	3348.4	3326.6	3159.4	3171.9	3394.6	3510.7	3646.0	3876.3	4221.3	4460.2	3747.7
57.5°	3459.5	3443.3	3329.7	3418.9	3747.7	3893.7	4053.4	4309.2	4590.6	4741.6	3904.3
60°	3576.8	3576.8	3519.4	3716.5	4189.5	4356.7	4515.8	4714.8	4958.7	4994.9	3968.0
62.5°	3665.4	3688.5	3709.1	4033.5	4608.7	4816.5	4991.2	5182.1	5339.9	5119.7	3818.2
65°	3793.9	3843.2	3959.2	4399.7	5127.8	5399.8	5635.6	5796.0	5648.7	5020.5	3329.7
67.5°	4014.8	4087.8	4334.8	4945.0	5922.6	6330.0	6559.0	6282.0	5588.2	4396.0	2550.5
70°	4213.8	4316.7	4739.1	5636.9	6955.8	7378.8	7273.4	6169.1	4867.0	3222.4	1569.1
72°	4081.5	4193.8	4757.8	5938.2	7508.0	7707.6	7151.7	5467.2	3760.8	1966.5	773.6
72.5°	3994.8	4111.5	4697.3	5930.7	7522.9	7665.8	6982.6	5188.3	3414.0	1720.7	625.8
75°	3337.2	3437.0	4039.1	5256.3	6629.5	6367.5	5449.1	3357.8	1569.1	555.9	321.9
77.5°	2179.3	2255.4	2785.1	3641.7	4643.6	4391.6	3316.6	1572.2	588.3	337.5	242.1
80°	1094.9	1149.2	1490.5	1914.7	2506.2	2305.9	1531.0	760.5	393.7	243.9	190.3
82.5°	761.8	811.7	1026.3	977.6	1047.5	1013.8	720.0	634.5	294.5	154.1	99.8
85°	638.9	690.7	849.1	696.9	570.2	519.7	516.0	599.6	194.7	76.1	84.2
87.5°	557.1	635.7	700.6	509.1	391.2	345.0	380.0	549.7	61.8	41.8	25.6
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°	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4	1419.4
2.5°	1391.9	1390.0	1380.7	1366.3	1355.7	1348.9	1335.8	1335.1	1336.4	1325.2	1329.5
5°	1352.6	1345.1	1320.8	1287.7	1260.9	1235.3	1207.2	1197.9	1189.8	1172.9	1174.8
7.5°	1311.4	1298.3	1255.9	1201.6	1149.8	1102.4	1055.6	1032.5	1015.1	993.2	993.2
10°	1287.1	1266.5	1201.6	1122.4	1040.0	970.8	900.9	859.1	828.5	800.5	798.6
12.5°	1285.8	1254.7	1164.2	1055.0	942.1	844.8	749.3	685.0	639.5	606.4	603.3
15°	1295.8	1252.2	1133.0	992.0	849.7	723.1	605.2	523.4	465.4	428.6	424.9
17.5°	1304.6	1249.0	1099.3	925.9	759.9	605.8	474.8	389.9	335.0	305.1	302.0
20°	1312.7	1242.2	1056.3	856.0	660.7	496.0	371.2	302.6	266.4	249.6	247.7
22.5°	1324.5	1235.9	1011.3	777.4	563.4	403.7	306.3	257.0	237.7	229.6	228.3
25°	1343.9	1236.6	967.7	696.9	474.2	336.3	265.2	234.6	224.0	218.4	218.4
27.5°	1371.9	1244.0	924.6	615.2	398.7	290.1	240.8	222.7	215.9	211.5	210.3
30°	1413.1	1257.8	879.1	537.8	338.8	258.3	226.5	215.2	209.6	205.9	205.3
32.5°	1473.0	1282.1	831.0	467.3	293.2	235.8	215.9	209.0	204.6	201.5	200.9
35°	1562.2	1325.2	784.2	407.4	260.8	219.6	207.1	201.5	199.0	197.8	197.2
37.5°	1693.3	1394.4	739.9	360.6	239.6	209.0	198.4	195.3	194.0	194.0	194.0
40°	1858.0	1485.5	700.0	327.5	227.7	200.9	192.2	189.7	189.7	190.3	190.3
42.5°	2058.2	1599.7	665.7	305.1	220.9	195.3	187.8	186.5	185.9	185.9	186.5
45°	2290.9	1734.4	644.5	287.6	215.9	192.2	184.7	184.0	181.6	180.3	180.3
47.5°	2524.9	1878.5	643.2	277.6	209.6	188.4	181.6	181.6	176.6	174.1	174.7
50°	2743.3	2007.7	657.0	275.1	205.9	182.8	178.4	179.1	172.2	169.1	168.5
52.5°	2919.2	2106.3	673.8	278.3	205.9	177.8	172.8	175.9	168.5	164.7	164.1
55°	3055.2	2174.9	680.0	285.1	208.4	173.4	167.8	172.8	167.2	162.2	162.2
57.5°	3152.5	2196.7	653.2	288.2	212.1	172.8	162.8	172.2	169.1	162.8	162.8
60°	3117.0	2070.1	553.4	276.4	211.5	171.6	159.1	173.4	175.3	168.5	168.5
62.5°	2839.3	1731.9	444.2	249.6	200.9	167.2	154.7	172.2	179.7	177.2	175.9
65°	2311.5	1270.2	344.4	217.7	182.8	157.8	145.4	161.0	169.7	172.2	172.8
67.5°	1629.0	804.2	267.7	185.3	160.3	144.1	134.8	142.2	145.4	146.6	149.1
70°	890.9	435.5	212.7	156.0	137.3	130.4	123.5	124.2	122.9	121.7	122.9
72°	447.3	284.5	179.7	135.4	121.7	117.3	114.2	112.3	112.3	110.4	111.1
72.5°	384.9	264.5	173.4	130.4	117.9	114.2	111.7	109.8	109.2	107.9	108.6
75°	256.4	209.6	144.7	109.2	100.4	98.0	99.2	97.3	98.0	96.7	97.3
77.5°	207.1	180.3	122.9	92.3	86.1	82.4	84.8	85.5	86.7	85.5	84.8
80°	173.4	153.5	102.9	76.1	71.7	68.6	69.9	74.2	74.9	71.1	70.5
82.5°	112.3	123.5	81.1	59.3	54.9	53.7	56.8	61.1	62.4	57.4	56.2
85°	94.2	99.2	58.6	40.6	36.2	34.9	41.2	45.5	48.7	43.7	42.4
87.5°	26.2	48.7	28.7	19.3	16.2	16.2	20.0	23.7	28.1	28.7	28.7
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)