

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: P196141

Luminaire Tested: **NVN-AF-01-LED-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196141
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24262)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-AF-01-LED-U-SL3
Description: NAVION ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6242.1 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

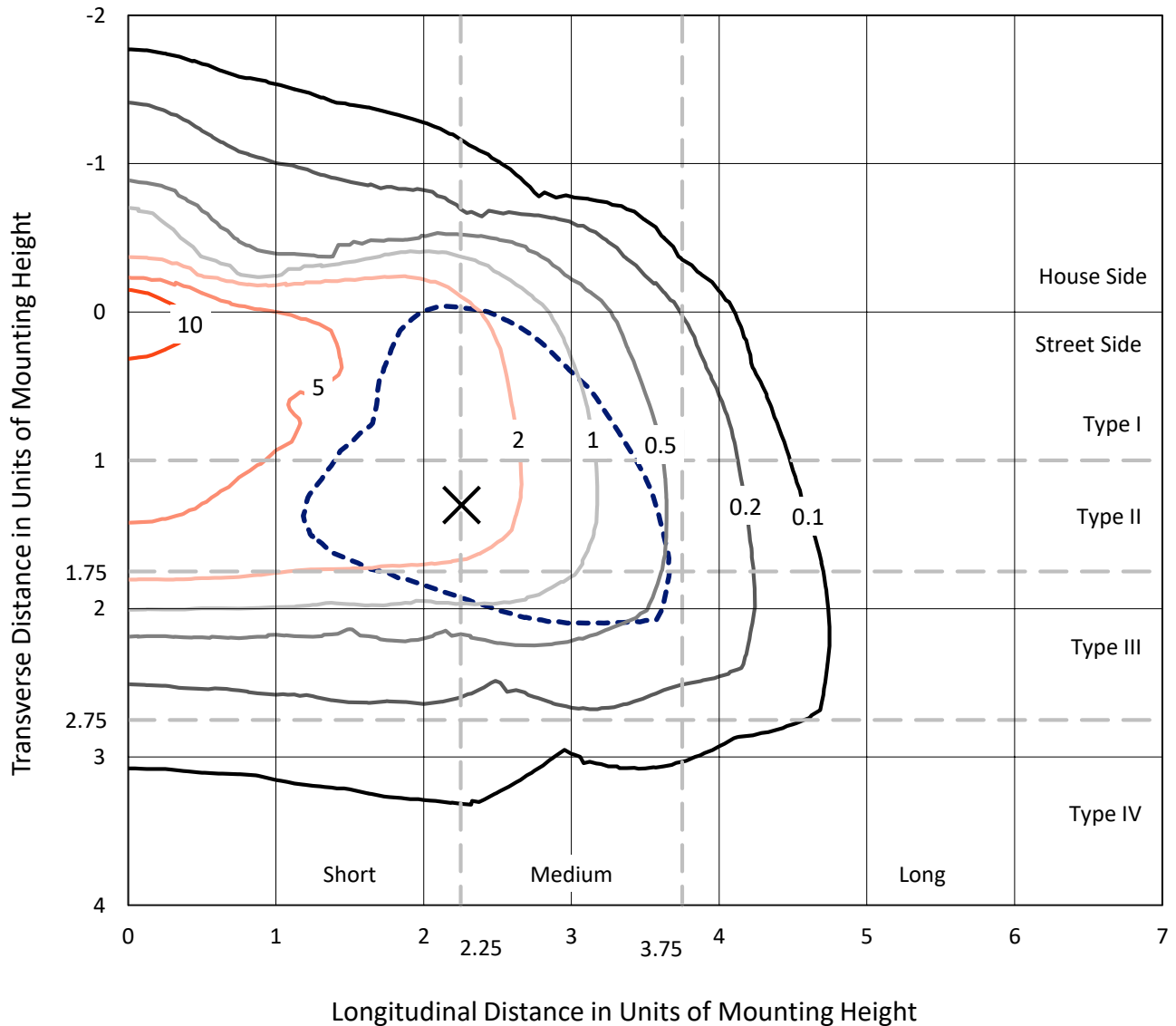
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

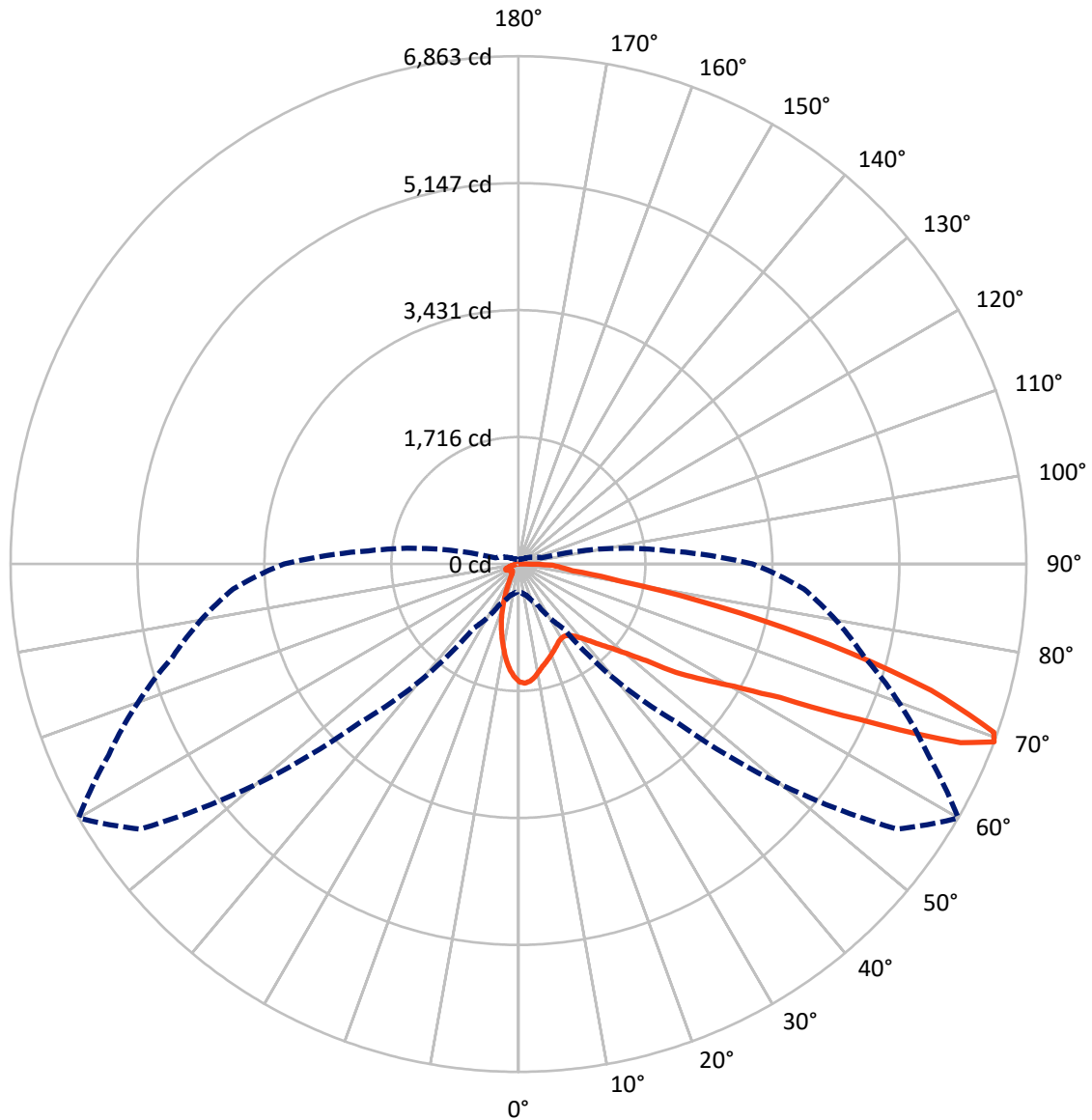
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.9 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	890.3	0.0	890.3
	% Fixture	14.3	0.0	14.3
Street Side	Lumens	5351.7	0.0	5351.7
	% Fixture	85.7	0.0	85.7
Total	Lumens	6242.1	0.0	6242.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.1	2.2
10°-20°	289.3	4.6
20°-30°	369.1	5.9
30°-40°	507.8	8.1
40°-50°	822.6	13.2
50°-60°	1291.1	20.7
60°-70°	1721.2	27.6
70°-80°	957.4	15.3
80°-90°	148.5	2.4
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°	6242.1	100.0
0°-180°	6242.1	100.0

Coefficient of Utilization



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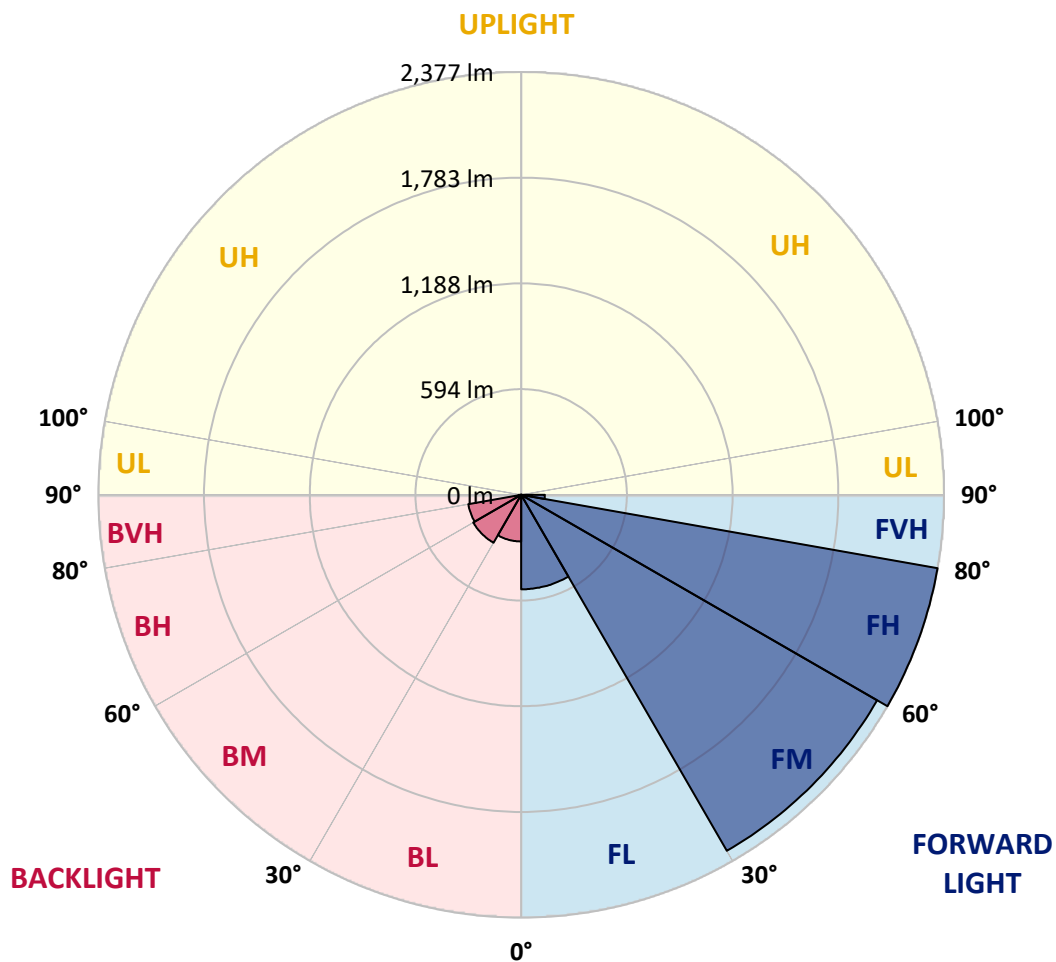
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	531.1	8.5			
FM	(30°-60°)	2310.5	37.0			
FH	(60°-80°)	2376.7	38.1			G2/5000
FVH	(80°-90°)	133.4	2.1			G2/225
BL	(0°-30°)	262.4	4.2	B1/500		
BM	(30°-60°)	311.0	5.0	B1/1000		
BH	(60°-80°)	301.9	4.8	B1/500		G1/500
BVH	(80°-90°)	15.0	0.2			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6
2.5°	1635.1	1639.5	1639.5	1635.9	1633.9	1622.3	1615.4	1610.7	1602.2	1586.7	1572.7
5°	1576.7	1585.1	1588.6	1590.3	1600.7	1597.0	1597.4	1594.3	1587.1	1570.2	1547.4
7.5°	1469.4	1471.0	1477.4	1488.2	1513.5	1531.1	1545.5	1548.2	1546.6	1534.2	1502.2
10°	1363.7	1366.6	1374.1	1392.5	1416.6	1441.7	1472.9	1485.8	1495.5	1491.4	1451.0
12.5°	1276.0	1276.4	1284.8	1306.1	1332.9	1364.5	1407.0	1427.0	1449.8	1459.0	1413.7
15°	1191.6	1197.2	1205.2	1230.8	1264.1	1304.1	1353.0	1380.6	1410.5	1436.9	1385.0
17.5°	1127.6	1132.0	1136.8	1158.0	1196.4	1246.5	1306.9	1336.5	1376.2	1416.6	1355.3
20°	1092.3	1093.9	1090.4	1100.7	1133.1	1187.2	1257.2	1292.9	1340.1	1396.9	1324.9
22.5°	1085.1	1085.1	1072.0	1069.9	1084.3	1130.0	1206.1	1249.6	1307.3	1383.3	1297.7
25°	1118.8	1116.3	1091.5	1068.7	1063.6	1086.8	1157.2	1210.9	1279.3	1382.9	1277.3
27.5°	1182.4	1179.2	1148.4	1109.9	1076.8	1066.7	1119.5	1174.3	1257.2	1396.5	1266.8
30°	1261.6	1260.5	1229.3	1181.2	1126.4	1074.7	1104.8	1155.6	1242.5	1421.8	1266.4
32.5°	1348.6	1342.9	1323.7	1275.6	1204.4	1119.1	1113.6	1156.3	1238.5	1458.6	1275.6
35°	1440.9	1436.9	1432.1	1383.7	1303.6	1197.6	1152.4	1184.0	1258.0	1509.8	1301.7
37.5°	1558.7	1554.3	1562.3	1509.5	1421.8	1300.5	1218.0	1239.2	1298.1	1584.2	1350.1
40°	1768.0	1755.2	1732.8	1651.6	1559.5	1426.6	1312.9	1316.1	1366.6	1684.0	1427.7
42.5°	2111.8	2070.6	1959.8	1810.4	1704.7	1573.1	1436.5	1421.4	1461.0	1815.6	1540.7
45°	2456.4	2410.1	2222.7	1983.7	1855.2	1730.3	1589.5	1553.0	1578.6	1969.0	1685.9
47.5°	2679.0	2656.2	2444.9	2157.1	2013.0	1901.7	1764.4	1704.3	1722.8	2142.7	1865.2
50°	2744.3	2724.6	2558.5	2292.7	2161.9	2108.6	1980.9	1901.3	1904.5	2345.6	2080.2
52.5°	2695.4	2687.4	2577.3	2376.8	2298.8	2326.8	2280.8	2169.9	2143.5	2568.1	2313.2
55°	2630.2	2633.0	2590.5	2461.2	2438.1	2530.1	2673.0	2583.8	2471.7	2799.9	2555.7
57.5°	2424.8	2426.8	2538.1	2622.1	2703.9	2815.1	2978.4	2940.8	2810.4	3050.0	2827.5
60°	1952.5	1968.2	2215.9	2589.0	3007.7	3376.7	3416.8	3351.9	3170.5	3338.3	3181.0
62.5°	1394.9	1408.9	1696.0	2247.5	2972.0	4012.3	4226.0	3968.3	3659.3	3769.4	3678.1
65°	732.9	730.5	952.7	1553.0	2503.3	4159.6	5501.3	5062.6	4482.7	4362.2	4158.4
67.5°	409.5	422.7	508.7	783.4	1631.5	3660.8	6315.9	6445.2	5627.5	4832.4	4137.6
69°	378.7	383.1	440.7	605.6	1063.6	3020.5	6245.8	6862.7	6110.1	4834.5	3871.1
70°	367.9	372.7	425.1	558.0	893.4	2474.8	5990.8	6813.8	6227.4	4727.2	3628.4
72.5°	329.8	336.2	387.1	501.6	752.9	1275.6	4825.7	5831.9	5641.1	4131.6	2813.5
75°	281.4	292.2	369.1	498.0	713.3	811.0	3218.2	4345.0	4198.4	2954.8	1596.3
77.5°	116.5	117.6	161.3	364.7	748.5	776.1	1729.6	2752.2	2436.5	1295.7	480.7
80°	81.2	79.7	80.4	106.5	604.1	781.3	887.4	1399.7	1087.9	341.9	224.9
82.5°	68.4	67.6	70.9	66.8	204.5	886.6	742.2	729.7	512.4	184.1	107.3
85°	45.2	44.0	58.0	60.9	97.3	704.1	798.1	573.6	381.9	98.5	45.6
87.5°	22.0	22.4	33.2	41.2	51.7	222.9	764.6	453.5	295.0	42.9	18.4
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6	1592.6
2.5°	1567.1	1555.1	1544.2	1530.6	1520.2	1511.4	1499.4	1499.0	1497.0	1499.9	1500.6
5°	1532.3	1512.2	1481.8	1447.8	1423.7	1392.1	1361.3	1350.9	1339.3	1338.1	1341.7
7.5°	1479.8	1448.6	1396.5	1344.5	1292.5	1239.2	1188.8	1163.2	1138.3	1130.8	1134.4
10°	1421.4	1381.7	1302.1	1217.2	1144.0	1064.7	987.9	938.3	893.0	873.8	878.6
12.5°	1375.8	1325.3	1213.2	1103.2	993.5	879.8	778.6	680.5	606.4	573.2	575.2
15°	1336.5	1272.0	1130.0	983.5	846.2	690.5	549.9	436.3	371.4	347.4	346.7
17.5°	1294.0	1216.0	1043.1	872.2	694.1	501.6	368.3	301.1	275.4	267.4	267.4
20°	1248.8	1158.4	952.3	750.9	534.0	350.3	277.0	250.9	241.3	239.0	238.6
22.5°	1206.8	1101.9	861.0	621.6	386.3	265.8	235.8	225.8	224.1	226.2	226.2
25°	1173.6	1052.3	768.5	485.5	281.0	222.6	209.7	208.6	214.5	221.8	222.9
27.5°	1148.8	1007.9	677.3	354.7	221.0	193.7	189.3	194.6	208.6	222.9	225.8
30°	1131.6	969.9	567.9	255.0	184.1	169.7	171.8	181.0	202.1	224.1	230.2
32.5°	1123.9	939.1	457.9	195.7	157.3	149.4	154.5	166.5	188.5	210.5	217.8
35°	1131.2	916.7	356.2	162.5	137.7	131.7	137.7	150.1	164.5	175.3	179.7
37.5°	1157.2	908.6	268.2	144.1	124.9	118.9	123.7	132.1	138.5	142.5	144.5
40°	1212.0	917.0	210.1	134.5	117.6	110.9	112.1	116.1	120.5	123.7	124.1
42.5°	1299.2	944.6	186.9	130.9	113.2	104.4	102.5	105.3	110.1	114.5	115.3
45°	1415.4	990.6	184.5	132.1	111.3	99.2	95.2	98.1	104.4	111.7	112.8
47.5°	1565.4	1063.6	195.7	138.5	112.5	96.5	90.4	93.3	101.7	111.3	112.8
50°	1743.2	1164.4	216.6	148.1	118.0	96.5	88.5	90.8	99.6	110.5	112.1
52.5°	1952.5	1304.9	238.1	157.7	126.1	100.0	89.3	88.9	96.9	106.9	108.8
55°	2183.5	1479.4	259.0	166.1	130.5	104.9	91.2	86.4	92.9	100.9	102.5
57.5°	2455.3	1718.4	295.4	174.1	132.9	108.4	93.7	84.1	87.7	93.3	94.4
60°	2824.0	2069.4	366.2	187.7	137.3	110.1	94.1	81.6	81.2	85.2	85.6
62.5°	3304.6	2480.5	433.9	203.8	146.1	110.5	92.5	80.1	76.0	77.2	77.2
65°	3646.5	2631.7	414.3	217.4	154.1	110.1	90.8	78.9	72.0	70.1	70.1
67.5°	3451.9	2324.8	351.8	221.0	154.9	105.7	87.3	76.0	68.4	63.6	63.6
69°	3166.1	2037.8	323.0	214.5	148.5	100.5	83.3	73.2	66.1	60.5	60.5
70°	2933.2	1820.4	305.5	206.9	140.9	96.1	79.7	70.5	63.6	58.8	58.4
72.5°	2189.8	1214.9	261.0	178.5	115.7	81.2	69.7	62.8	57.3	54.0	54.0
75°	1155.6	608.9	213.7	145.7	89.3	64.9	57.3	52.9	49.6	49.2	48.8
77.5°	378.7	275.4	153.7	109.7	65.7	50.4	45.6	42.9	42.5	44.0	44.0
80°	204.5	164.5	98.8	74.1	45.6	37.6	35.2	34.8	36.0	38.5	38.5
82.5°	99.2	81.2	58.8	45.6	31.2	27.6	27.6	28.0	29.7	32.4	32.4
85°	42.9	38.5	34.1	25.6	19.2	17.2	19.6	21.6	22.8	24.9	25.6
87.5°	20.5	18.0	15.7	10.0	8.4	8.8	10.4	12.8	15.2	16.8	17.2
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)