

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: LUMARK

Report Number: P962590

Luminaire Tested: **NAV-SB2C-827-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962590
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-827-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11113.1 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 100.9
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: 24 FT

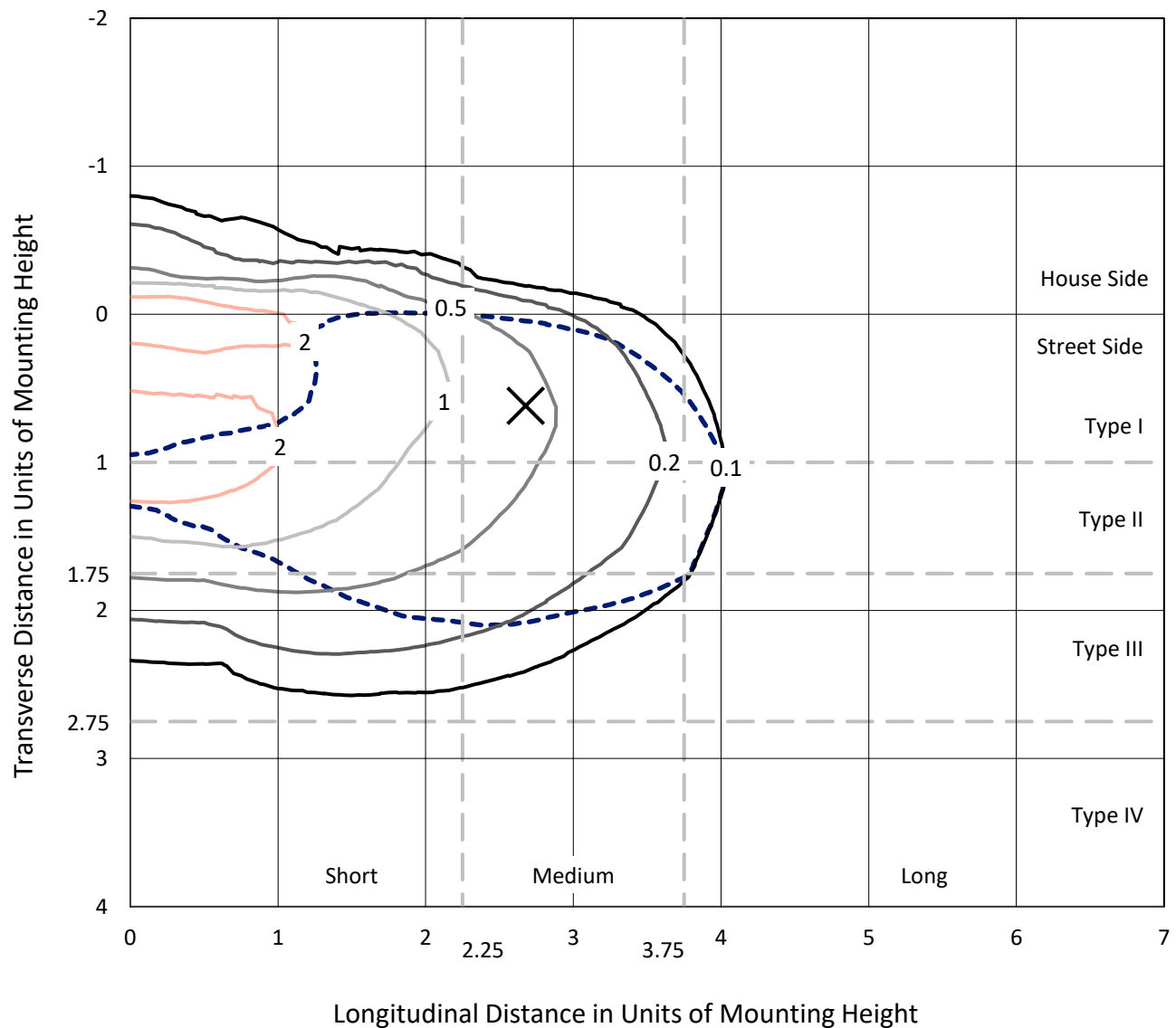


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Iso-Footcandle Lines of Horizontal Illumination

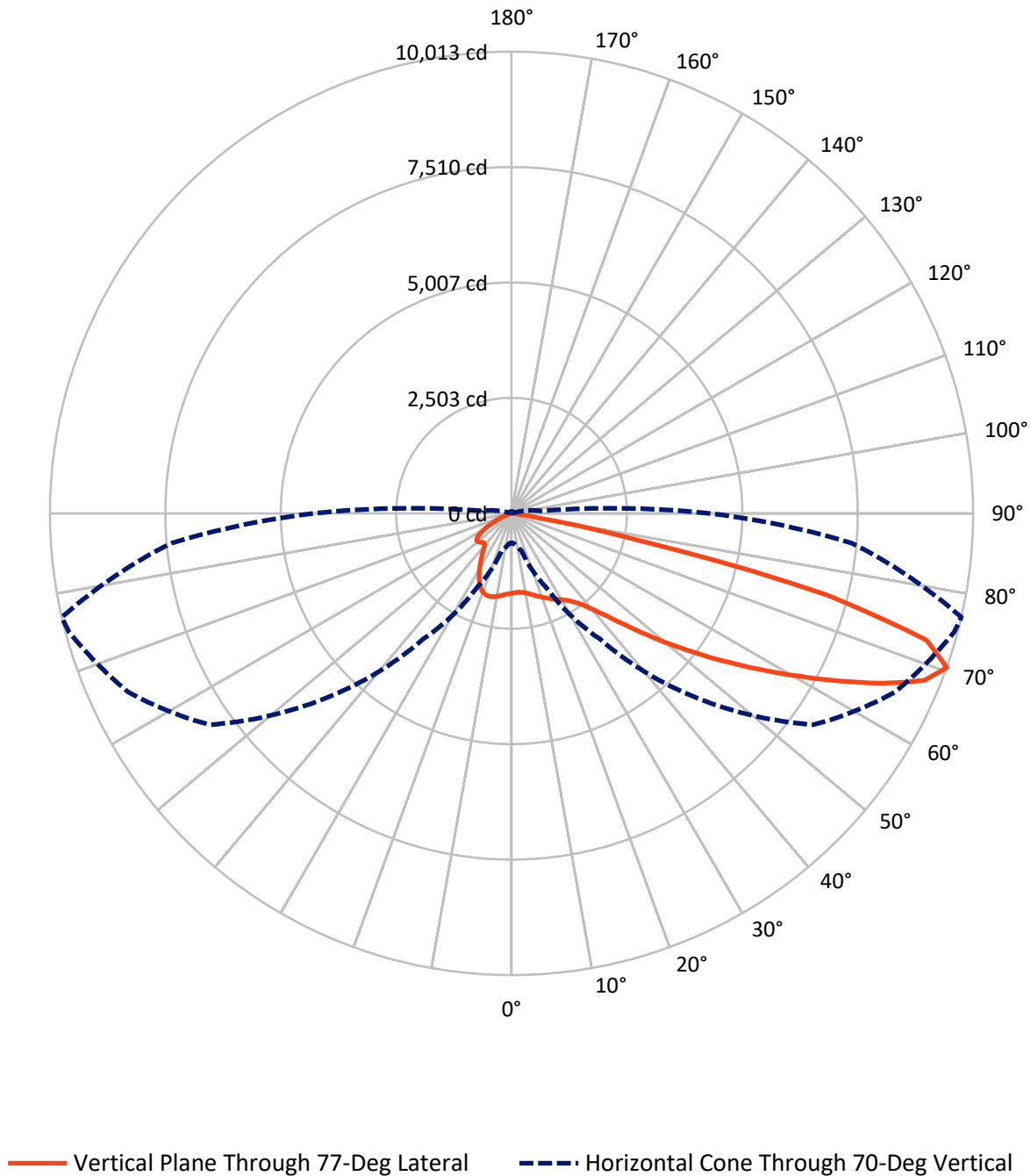
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1171.5	0.0	1171.5
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	9941.6	0.0	9941.6
	% Fixture	89.5	0.0	89.5
Total	Lumens	11113.1	0.0	11113.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.4	1.3
10°-20°	354.6	3.2
20°-30°	548.5	4.9
30°-40°	995.4	9.0
40°-50°	1878.9	16.9
50°-60°	2714.8	24.4
60°-70°	2889.8	26.0
70°-80°	1531.4	13.8
80°-90°	50.3	0.5
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°	11113.1	100.0
0°-180°	11113.1	100.0

Coefficient of Utilization



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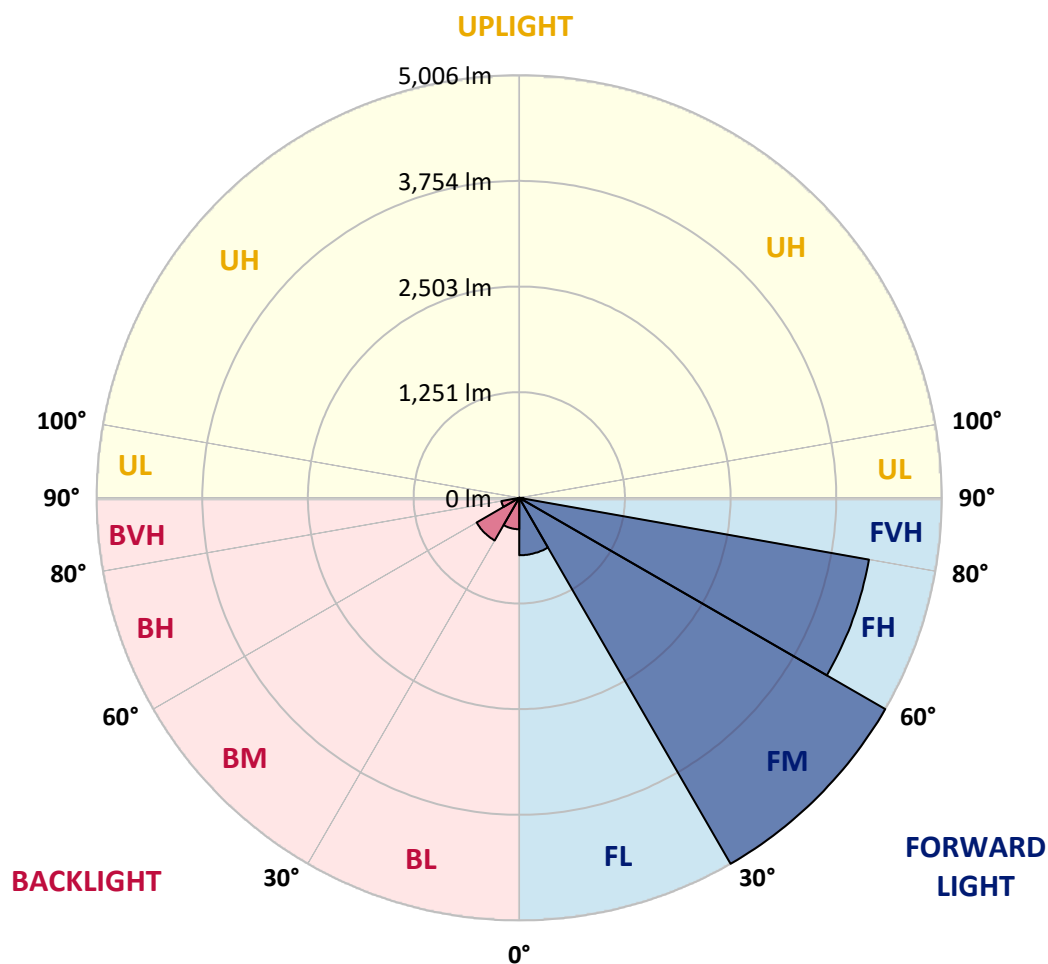
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	680.4	6.1			
FM	(30°-60°)	5005.8	45.0			
FH	(60°-80°)	4206.4	37.9			G2/5000
FVH	(80°-90°)	48.9	0.4			G1/100
BL	(0°-30°)	372.2	3.3	B1/500		
BM	(30°-60°)	583.2	5.2	B1/1000		
BH	(60°-80°)	214.8	1.9	B1/500		G1/500
BVH	(80°-90°)	1.4	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5
2.5°	1627.5	1642.2	1640.1	1649.9	1653.4	1667.5	1681.5	1700.5	1721.5	1720.8	1734.8
5°	1535.6	1550.3	1553.8	1567.1	1583.9	1605.7	1634.5	1672.4	1711.6	1718.0	1746.1
7.5°	1426.8	1442.2	1451.3	1477.9	1508.9	1553.8	1600.8	1656.2	1721.5	1730.6	1784.6
10°	1317.9	1332.0	1344.0	1381.8	1431.0	1497.6	1574.1	1654.1	1741.9	1755.2	1831.7
12.5°	1250.6	1263.9	1277.3	1310.3	1371.3	1452.7	1556.6	1664.0	1775.5	1794.5	1895.5
15°	1226.7	1238.7	1249.2	1278.7	1335.5	1428.1	1553.1	1684.3	1818.4	1843.7	1972.7
17.5°	1230.2	1236.6	1243.6	1266.1	1321.4	1417.0	1559.4	1719.4	1868.9	1891.3	2049.9
20°	1250.6	1254.1	1254.8	1270.3	1319.4	1415.5	1572.0	1753.1	1916.6	1946.8	2126.5
22.5°	1276.5	1278.0	1276.5	1287.1	1332.7	1426.1	1588.9	1793.7	1969.9	1998.0	2203.6
25°	1398.0	1371.3	1337.6	1317.2	1355.2	1446.4	1614.2	1848.5	2028.2	2055.5	2278.8
27.5°	1774.9	1698.3	1577.7	1442.2	1401.5	1475.9	1649.2	1903.9	2087.1	2111.7	2359.4
30°	2386.8	2286.5	2081.6	1776.2	1550.3	1537.6	1694.8	1959.4	2149.6	2176.3	2445.8
32.5°	3000.2	2975.6	2739.1	2316.6	1885.0	1675.2	1770.6	2034.5	2232.4	2253.5	2562.3
35°	3620.6	3570.7	3377.1	2959.5	2400.9	1955.2	1897.0	2132.7	2341.2	2365.1	2732.1
37.5°	4095.7	4065.5	3945.5	3601.6	3012.8	2387.5	2113.1	2285.0	2499.1	2525.8	2949.6
40°	4515.3	4501.3	4460.6	4234.0	3697.1	2953.1	2449.2	2520.9	2718.1	2749.7	3216.3
42.5°	4845.2	4878.2	4901.3	4838.2	4402.4	3598.8	2901.3	2852.1	3023.3	3055.6	3556.0
45°	5182.8	5194.0	5287.4	5378.6	5102.8	4273.9	3410.7	3240.2	3403.0	3443.0	3963.1
47.5°	5399.6	5444.5	5608.8	5769.4	5691.5	4943.5	3958.1	3698.5	3843.0	3918.2	4419.2
50°	5415.8	5500.7	5726.7	6006.7	6120.4	5580.7	4553.3	4220.6	4374.3	4457.1	4906.3
52.5°	5146.9	5279.0	5629.1	6039.0	6351.9	6120.4	5168.8	4742.8	4940.0	5048.0	5411.6
55°	3946.1	4118.9	5262.0	5863.5	6361.0	6529.5	5768.1	5286.6	5570.2	5692.2	5957.5
57.5°	3438.1	3525.1	4137.1	5558.9	6191.9	6694.4	6309.8	5804.6	6255.8	6407.4	6473.4
60°	2860.6	2975.0	3469.7	5060.6	5962.4	6710.6	6788.5	6472.7	6999.0	7169.6	6946.3
62.5°	1944.0	2068.1	2560.1	4204.4	5648.8	6702.9	7180.7	7160.4	7825.1	8008.2	7347.1
65°	1204.3	1282.2	1606.4	3433.1	5210.2	6711.3	7591.4	7995.5	8696.6	8882.6	7657.3
67.5°	951.6	987.4	1156.6	2636.0	4454.3	6521.8	8001.2	8780.9	9517.0	9664.4	7752.1
70°	639.3	661.1	841.4	1767.1	3313.9	5647.3	7993.5	9175.3	9939.5	10013.2	7406.8
72.5°	336.8	353.7	492.0	818.3	2001.5	4014.3	6737.9	8703.7	9519.2	9408.3	6330.9
75°	168.4	196.5	331.3	415.4	854.7	2238.7	4184.2	6862.2	7492.3	7062.9	4062.0
77.5°	127.7	154.4	273.7	273.7	297.6	753.7	1772.0	3742.7	3452.1	2874.5	1192.4
80°	81.4	105.3	239.3	207.0	124.2	191.6	461.8	1048.5	733.4	557.9	216.9
82.5°	47.8	68.8	199.3	136.8	69.5	70.9	130.6	223.1	190.1	148.1	66.6
85°	19.0	44.9	136.8	54.0	27.4	17.5	39.3	47.8	39.3	29.5	16.8
87.5°	0.0	10.6	23.9	0.0	2.2	1.4	2.8	3.5	3.5	2.8	5.6
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°	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5	1733.5
2.5°	1741.2	1742.6	1746.8	1747.4	1737.7	1725.0	1720.1	1718.0	1709.6	1708.9	1710.3
5°	1762.2	1768.5	1762.2	1743.9	1700.5	1639.4	1593.1	1555.1	1520.8	1510.2	1504.0
7.5°	1804.3	1810.7	1791.7	1720.1	1610.6	1489.2	1379.8	1302.6	1233.1	1207.0	1196.6
10°	1864.7	1873.1	1813.4	1668.9	1475.2	1280.1	1094.8	964.2	862.5	821.1	803.6
12.5°	1940.4	1944.0	1825.3	1591.0	1299.0	1020.4	758.0	618.3	527.8	494.0	483.5
15°	2024.0	2019.0	1826.8	1485.0	1059.0	721.4	494.8	406.3	369.8	358.6	358.6
17.5°	2111.7	2091.3	1798.7	1332.0	795.8	493.3	367.1	345.9	339.7	336.8	336.2
20°	2198.0	2152.4	1747.4	1132.0	571.2	368.5	333.3	327.1	323.5	322.2	320.7
22.5°	2276.6	2198.7	1659.8	899.7	414.7	325.6	315.1	309.4	303.2	300.3	299.7
25°	2353.1	2225.4	1536.3	682.9	332.0	304.6	296.1	285.7	277.2	273.7	272.3
27.5°	2427.5	2242.2	1381.8	505.3	296.1	285.0	269.5	254.7	248.5	247.0	245.6
30°	2506.8	2247.8	1206.4	376.9	274.4	260.3	237.9	221.1	217.6	218.2	218.2
32.5°	2603.7	2256.2	1029.5	308.8	256.1	230.9	204.2	186.7	183.9	186.7	185.9
35°	2719.4	2273.1	859.0	284.2	240.1	200.7	171.9	157.2	154.4	156.5	155.8
37.5°	2876.7	2300.5	699.7	279.3	226.7	175.5	144.5	132.6	132.6	133.4	132.6
40°	3085.8	2373.5	557.2	275.8	219.7	156.5	122.1	117.2	119.3	120.7	120.7
42.5°	3340.6	2528.6	461.0	271.6	212.0	148.1	110.9	108.8	112.2	113.7	113.7
45°	3626.1	2725.1	427.4	264.6	204.9	153.6	106.0	103.1	107.4	108.0	108.8
47.5°	3921.6	2917.4	423.2	256.9	197.9	162.2	104.6	98.3	103.1	103.8	104.6
50°	4220.6	3043.0	427.4	245.0	186.7	162.2	105.3	93.4	97.6	99.6	100.3
52.5°	4521.7	3100.5	424.6	218.9	167.1	152.3	105.3	89.2	93.4	94.7	94.7
55°	4813.6	3089.4	381.8	180.4	141.8	134.8	102.5	85.6	88.5	89.2	89.2
57.5°	5044.5	2932.8	302.5	140.3	115.1	112.2	93.4	81.4	83.5	82.8	82.8
60°	5165.2	2588.9	216.2	108.0	90.5	88.5	82.1	75.7	77.2	73.7	73.0
62.5°	5166.6	2134.2	144.5	85.6	72.3	70.2	70.2	68.1	66.6	59.7	57.5
65°	5056.4	1629.5	96.1	68.1	58.2	54.7	58.9	58.2	53.3	43.6	42.1
67.5°	4806.6	1068.2	73.0	53.3	44.9	42.8	47.0	49.1	45.6	36.5	35.8
70°	4292.9	621.8	60.4	41.4	33.7	31.6	37.9	42.1	37.9	29.5	28.1
72.5°	3565.9	335.5	49.1	30.9	23.2	21.0	30.1	34.3	30.1	21.7	21.0
75°	2313.8	179.7	37.9	20.4	11.9	13.3	22.4	25.2	21.0	14.0	12.6
77.5°	776.8	79.3	23.9	9.8	5.6	5.6	13.3	15.5	9.8	4.9	4.2
80°	173.3	33.0	9.8	4.2	2.2	2.2	2.8	2.8	1.4	0.0	0.0
82.5°	56.9	13.3	4.2	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	21.7	4.9	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)