

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: P963675

Luminaire Tested: **NAV-SB3A-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963675
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-SB3A-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 350mA 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: 10319.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G2

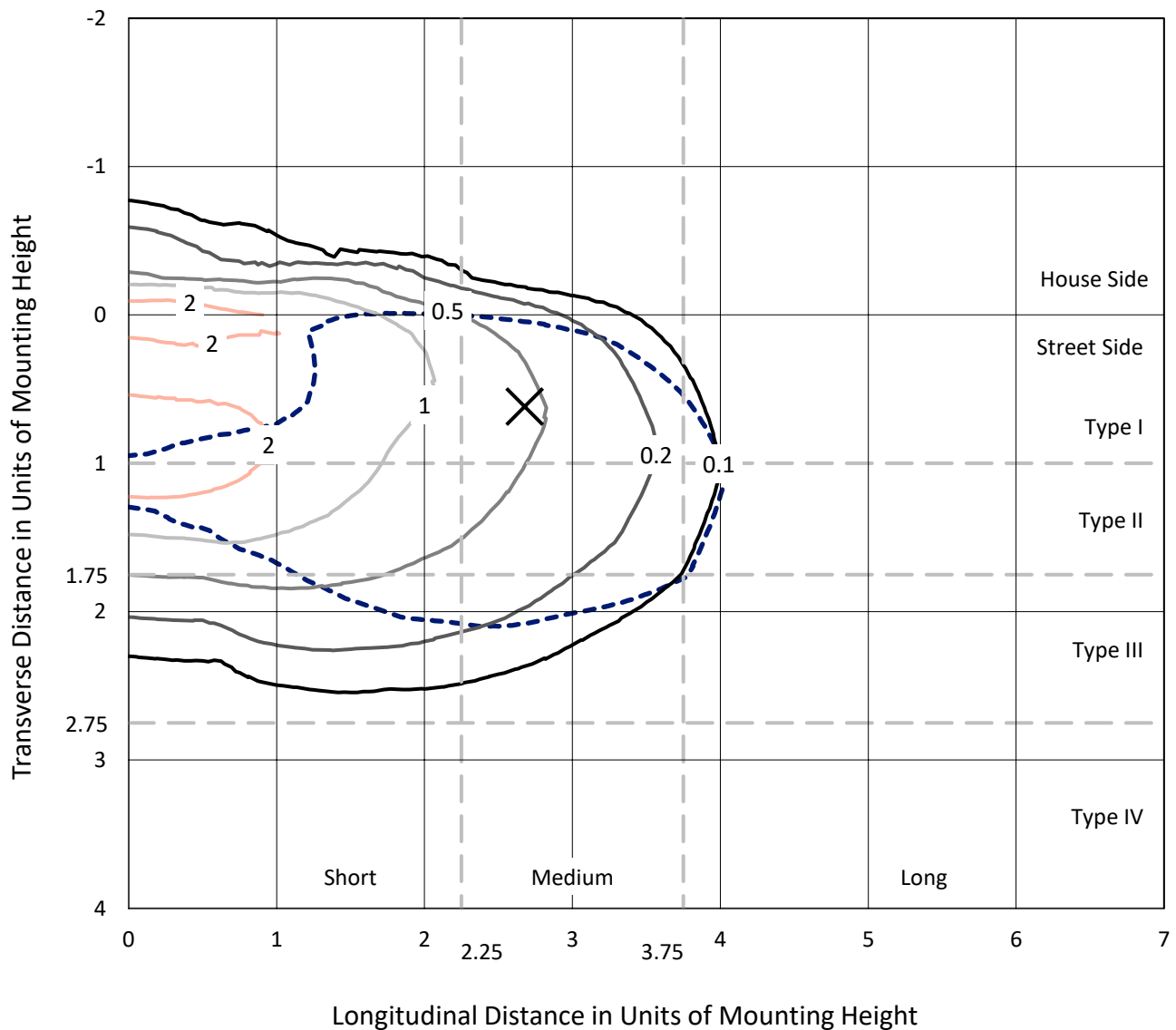
Input Watts (W): 84.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

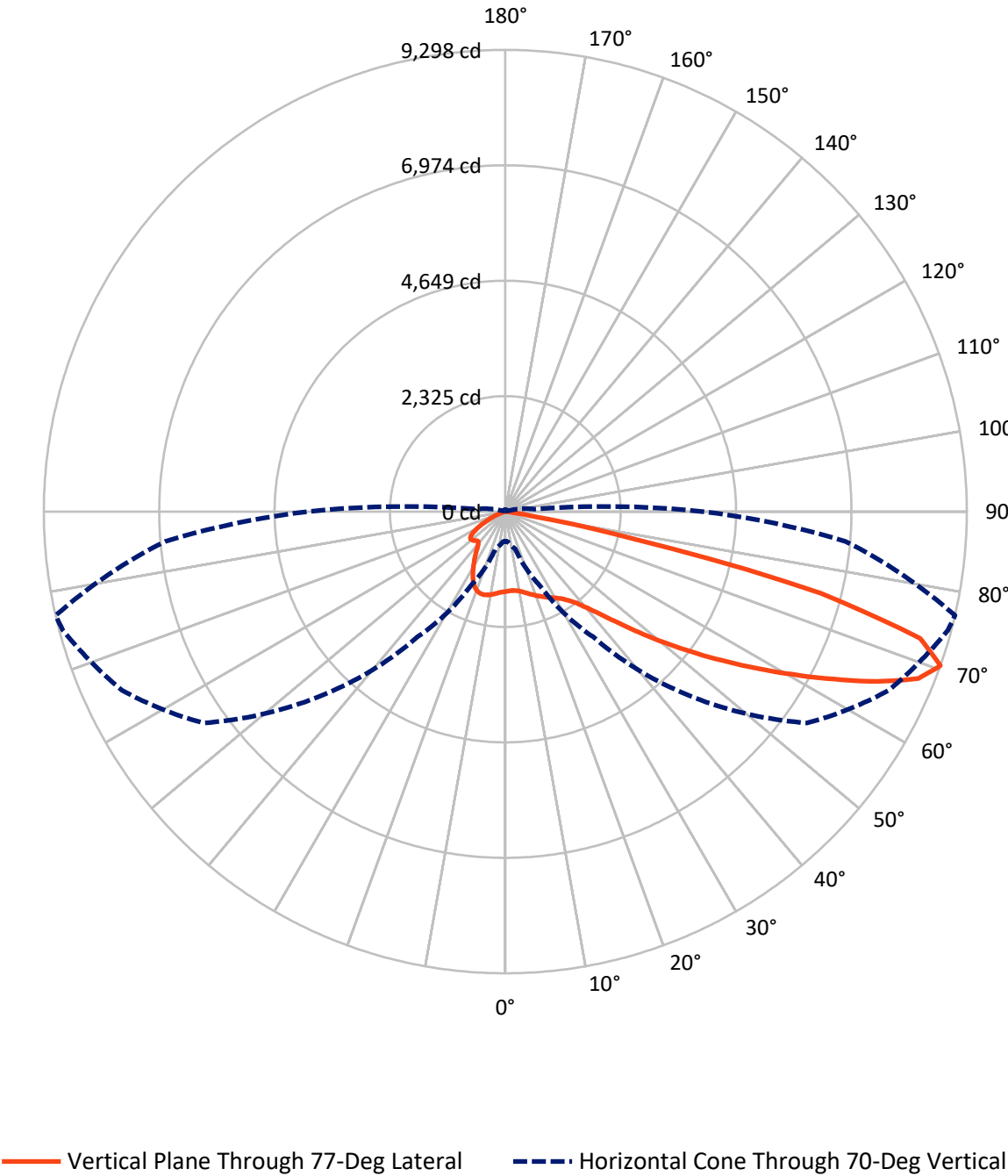
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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	1087.8	0.0	1087.8
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	9231.9	0.0	9231.9
	% Fixture	89.5	0.0	89.5
Total	Lumens	10319.7	0.0	10319.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.7	1.3
10°-20°	329.3	3.2
20°-30°	509.4	4.9
30°-40°	924.3	9.0
40°-50°	1744.7	16.9
50°-60°	2521.0	24.4
60°-70°	2683.5	26.0
70°-80°	1422.1	13.8
80°-90°	46.7	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°	10319.7	100.0
0°-180°	10319.7	100.0

Coefficient of Utilization



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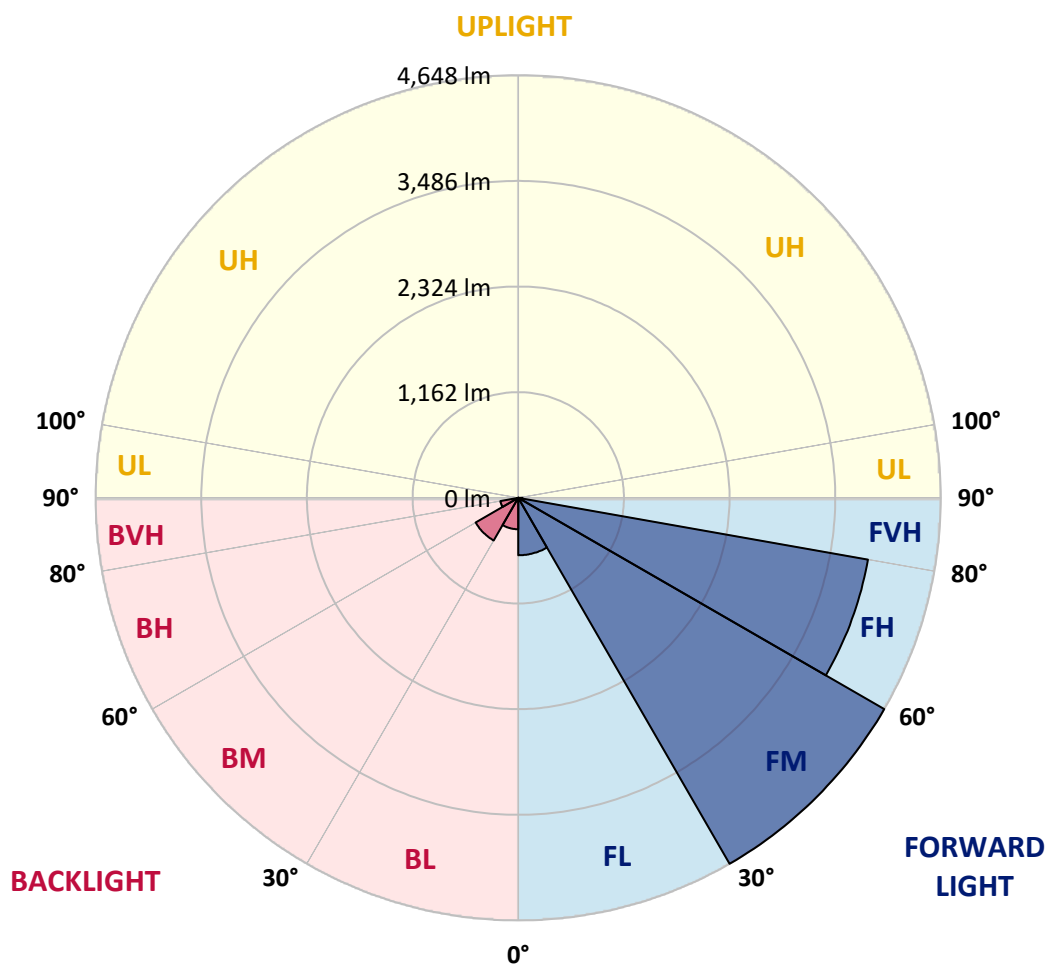
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	631.8	6.1			
FM	(30°-60°)	4648.5	45.0			
FH	(60°-80°)	3906.1	37.9			G2/5000
FVH	(80°-90°)	45.4	0.4			G1/100
BL	(0°-30°)	345.6	3.3	B1/500		
BM	(30°-60°)	541.5	5.2	B1/1000		
BH	(60°-80°)	199.4	1.9	B1/500		G1/500
BVH	(80°-90°)	1.3	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7
2.5°	1511.3	1525.0	1523.0	1532.2	1535.3	1548.5	1561.5	1579.0	1598.6	1598.0	1611.0
5°	1425.9	1439.6	1442.9	1455.2	1470.9	1491.1	1517.8	1553.0	1589.5	1595.3	1621.4
7.5°	1324.9	1339.3	1347.7	1372.5	1401.2	1442.9	1486.6	1538.0	1598.6	1607.1	1657.2
10°	1223.8	1236.9	1248.0	1283.2	1328.8	1390.7	1461.8	1536.1	1617.6	1629.9	1700.9
12.5°	1161.3	1173.7	1186.1	1216.7	1273.5	1349.0	1445.5	1545.2	1648.8	1666.3	1760.2
15°	1139.2	1150.3	1160.0	1187.4	1240.1	1326.2	1442.2	1564.0	1688.6	1712.0	1831.9
17.5°	1142.5	1148.3	1154.8	1175.7	1227.1	1315.8	1448.0	1596.6	1735.4	1756.3	1903.6
20°	1161.3	1164.6	1165.2	1179.6	1225.2	1314.5	1459.8	1627.9	1779.8	1807.8	1974.7
22.5°	1185.4	1186.7	1185.4	1195.3	1237.6	1324.2	1475.5	1665.7	1829.3	1855.4	2046.3
25°	1298.2	1273.5	1242.1	1223.2	1258.4	1343.2	1498.9	1716.6	1883.4	1908.9	2116.0
27.5°	1648.1	1577.1	1465.0	1339.3	1301.4	1370.5	1531.5	1768.0	1938.2	1960.9	2191.0
30°	2216.5	2123.2	1932.9	1649.4	1439.6	1427.8	1573.9	1819.6	1996.2	2020.9	2271.2
32.5°	2786.0	2763.2	2543.5	2151.3	1750.5	1555.6	1644.2	1889.3	2073.1	2092.6	2379.3
35°	3362.1	3315.9	3136.0	2748.2	2229.5	1815.6	1761.6	1980.5	2174.0	2196.2	2537.1
37.5°	3803.3	3775.3	3663.9	3344.5	2797.7	2217.1	1962.3	2122.0	2320.7	2345.4	2739.1
40°	4193.0	4180.0	4142.1	3931.7	3433.1	2742.3	2274.4	2340.9	2524.1	2553.4	2986.7
42.5°	4499.3	4529.9	4551.4	4492.8	4088.1	3341.9	2694.1	2648.5	2807.5	2837.5	3302.1
45°	4812.8	4823.2	4909.9	4994.6	4738.5	3968.8	3167.2	3008.9	3160.1	3197.2	3680.2
47.5°	5014.1	5055.8	5208.3	5357.6	5285.2	4590.6	3675.5	3434.5	3568.6	3638.4	4103.7
50°	5029.2	5108.0	5317.8	5577.8	5683.4	5182.3	4228.2	3919.3	4062.0	4139.0	4556.0
52.5°	4779.6	4902.1	5227.3	5607.9	5898.5	5683.4	4799.8	4404.1	4587.3	4687.6	5025.3
55°	3664.5	3824.8	4886.4	5444.9	5907.0	6063.4	5356.2	4909.2	5172.5	5285.9	5532.2
57.5°	3192.7	3273.4	3841.7	5162.1	5749.9	6216.5	5859.4	5390.2	5809.2	5950.0	6011.2
60°	2656.3	2762.6	3222.0	4699.4	5536.8	6231.5	6303.9	6010.6	6499.3	6657.7	6450.4
62.5°	1805.2	1920.5	2377.4	3904.3	5245.5	6224.3	6668.1	6649.3	7266.4	7436.5	6822.6
65°	1118.3	1190.6	1491.7	3188.1	4838.2	6232.2	7049.3	7424.8	8075.8	8248.5	7110.6
67.5°	883.7	917.0	1074.0	2447.8	4136.3	6056.2	7430.0	8154.0	8837.7	8974.5	7198.6
70°	593.7	613.9	781.4	1640.9	3077.3	5244.2	7422.8	8520.3	9229.9	9298.4	6878.0
72.5°	312.8	328.4	456.8	759.8	1858.6	3727.7	6256.9	8082.3	8839.6	8736.6	5879.0
75°	156.4	182.4	307.6	385.8	793.8	2078.9	3885.4	6372.3	6957.5	6558.7	3772.0
77.5°	118.6	143.4	254.2	254.2	276.3	699.9	1645.5	3475.5	3205.7	2669.3	1107.2
80°	75.6	97.8	222.2	192.3	115.3	177.9	428.9	973.6	681.0	518.1	201.4
82.5°	44.3	63.9	185.1	127.1	64.5	65.8	121.3	207.3	176.6	137.6	61.9
85°	17.6	41.7	127.1	50.2	25.4	16.3	36.5	44.3	36.5	27.4	15.7
87.5°	0.0	9.7	22.1	0.0	1.9	1.3	2.6	3.3	3.3	2.6	5.2
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°	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7	1609.7
2.5°	1616.8	1618.2	1622.1	1622.7	1613.6	1601.9	1597.3	1595.3	1587.5	1586.9	1588.1
5°	1636.4	1642.3	1636.4	1619.5	1579.0	1522.3	1479.4	1444.1	1412.2	1402.4	1396.6
7.5°	1675.5	1681.4	1663.8	1597.3	1495.7	1382.9	1281.2	1209.5	1145.0	1120.9	1111.1
10°	1731.5	1739.4	1684.0	1549.7	1369.9	1188.7	1016.6	895.4	800.9	762.5	746.2
12.5°	1802.0	1805.2	1695.0	1477.4	1206.3	947.6	703.9	574.1	490.1	458.8	449.1
15°	1879.4	1874.9	1696.4	1379.0	983.4	669.9	459.4	377.3	343.5	333.0	333.0
17.5°	1960.9	1942.1	1670.3	1236.9	739.0	458.2	340.8	321.2	315.4	312.8	312.1
20°	2041.1	1998.7	1622.7	1051.1	530.4	342.1	309.5	303.7	300.4	299.1	297.9
22.5°	2114.1	2041.8	1541.3	835.5	385.2	302.4	292.6	287.4	281.6	278.9	278.3
25°	2185.1	2066.5	1426.6	634.1	308.2	282.8	275.0	265.3	257.4	254.2	252.9
27.5°	2254.2	2082.2	1283.2	469.2	275.0	264.6	250.2	236.6	230.7	229.4	228.1
30°	2327.9	2087.4	1120.2	349.9	254.8	241.8	220.9	205.3	202.0	202.6	202.6
32.5°	2417.8	2095.2	956.0	286.8	237.9	214.4	189.6	173.3	170.8	173.3	172.7
35°	2525.3	2110.9	797.7	263.9	222.8	186.3	159.7	146.0	143.4	145.3	144.6
37.5°	2671.3	2136.3	649.7	259.3	210.5	163.0	134.3	123.2	123.2	123.8	123.2
40°	2865.5	2204.1	517.4	256.1	204.0	145.3	113.4	108.9	110.8	112.1	112.1
42.5°	3102.1	2348.1	428.1	252.3	196.8	137.6	103.0	101.0	104.2	105.6	105.6
45°	3367.3	2530.5	396.9	245.7	190.3	142.7	98.4	95.8	99.7	100.3	101.0
47.5°	3641.7	2709.1	393.0	238.5	183.8	150.6	97.1	91.2	95.8	96.5	97.1
50°	3919.3	2825.7	396.9	227.4	173.3	150.6	97.8	86.7	90.6	92.6	93.2
52.5°	4198.9	2879.2	394.3	203.4	155.1	141.4	97.8	82.7	86.7	87.9	87.9
55°	4470.0	2868.8	354.5	167.5	131.6	125.2	95.1	79.5	82.1	82.7	82.7
57.5°	4684.4	2723.4	280.8	130.4	106.9	104.2	86.7	75.6	77.6	76.9	76.9
60°	4796.5	2404.1	200.7	100.3	84.0	82.1	76.3	70.4	71.6	68.5	67.8
62.5°	4797.8	1981.8	134.3	79.5	67.1	65.2	65.2	63.2	61.9	55.4	53.4
65°	4695.4	1513.2	89.3	63.2	54.1	50.8	54.7	54.1	49.5	40.4	39.1
67.5°	4463.5	991.9	67.8	49.5	41.7	39.8	43.7	45.6	42.3	33.9	33.2
70°	3986.4	577.4	56.1	38.4	31.3	29.3	35.2	39.1	35.2	27.4	26.0
72.5°	3311.3	311.5	45.6	28.7	21.5	19.6	28.0	32.0	28.0	20.2	19.6
75°	2148.6	166.9	35.2	18.9	11.1	12.4	20.8	23.5	19.6	13.0	11.7
77.5°	721.4	73.6	22.1	9.1	5.2	5.2	12.4	14.3	9.1	4.6	3.9
80°	160.9	30.6	9.1	3.9	1.9	1.9	2.6	2.6	1.3	0.0	0.0
82.5°	52.8	12.4	3.9	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	20.2	4.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.8	0.6	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)