

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: P961939

Luminaire Tested: **NAV-SB2B-735-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961939
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-SB2B-735-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 450mA 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: 9609.4 lumens
Efficiency: N/A
Efficacy: 130.0 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): 73.9
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

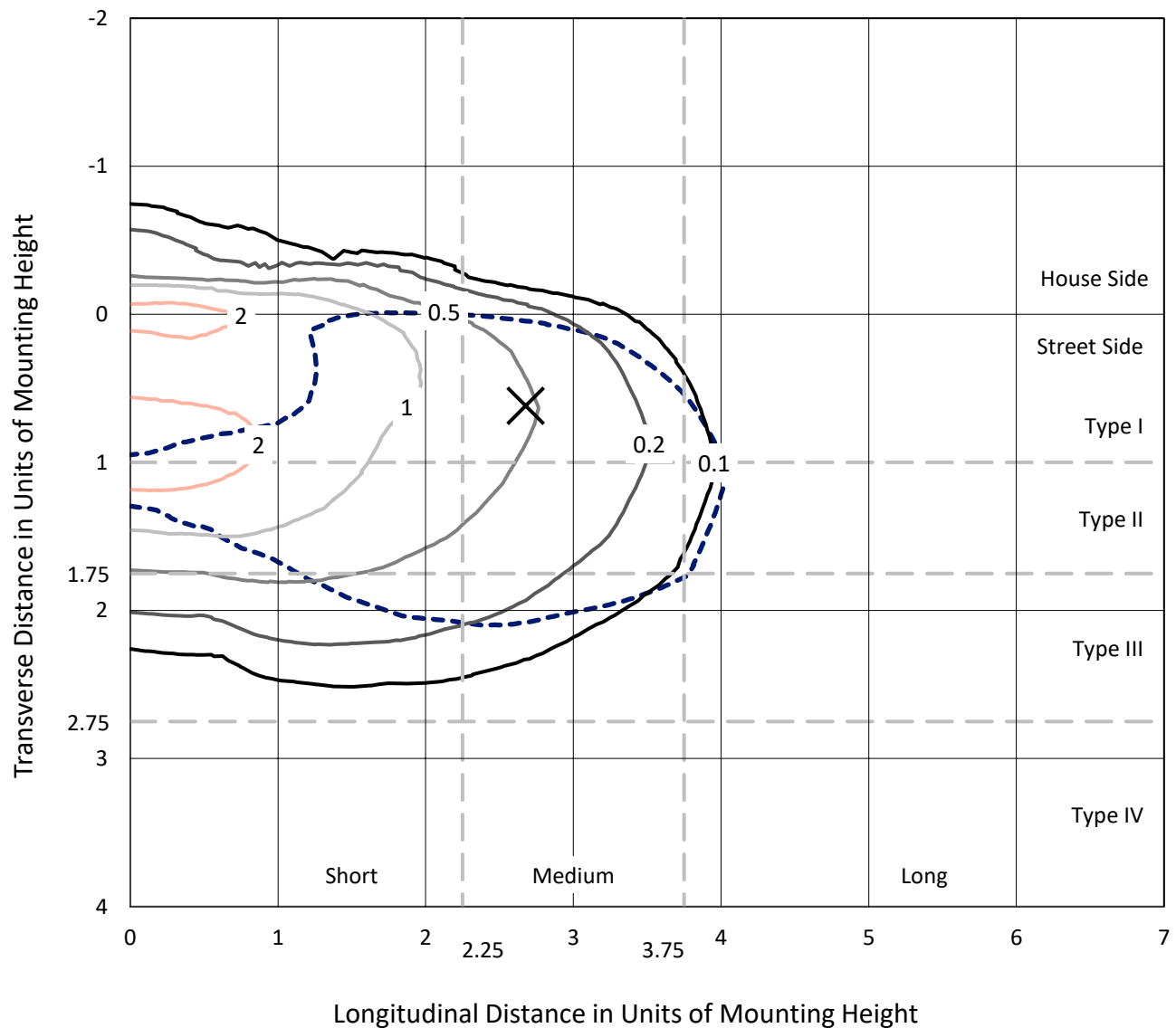


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Iso-Footcandle Lines of Horizontal Illumination

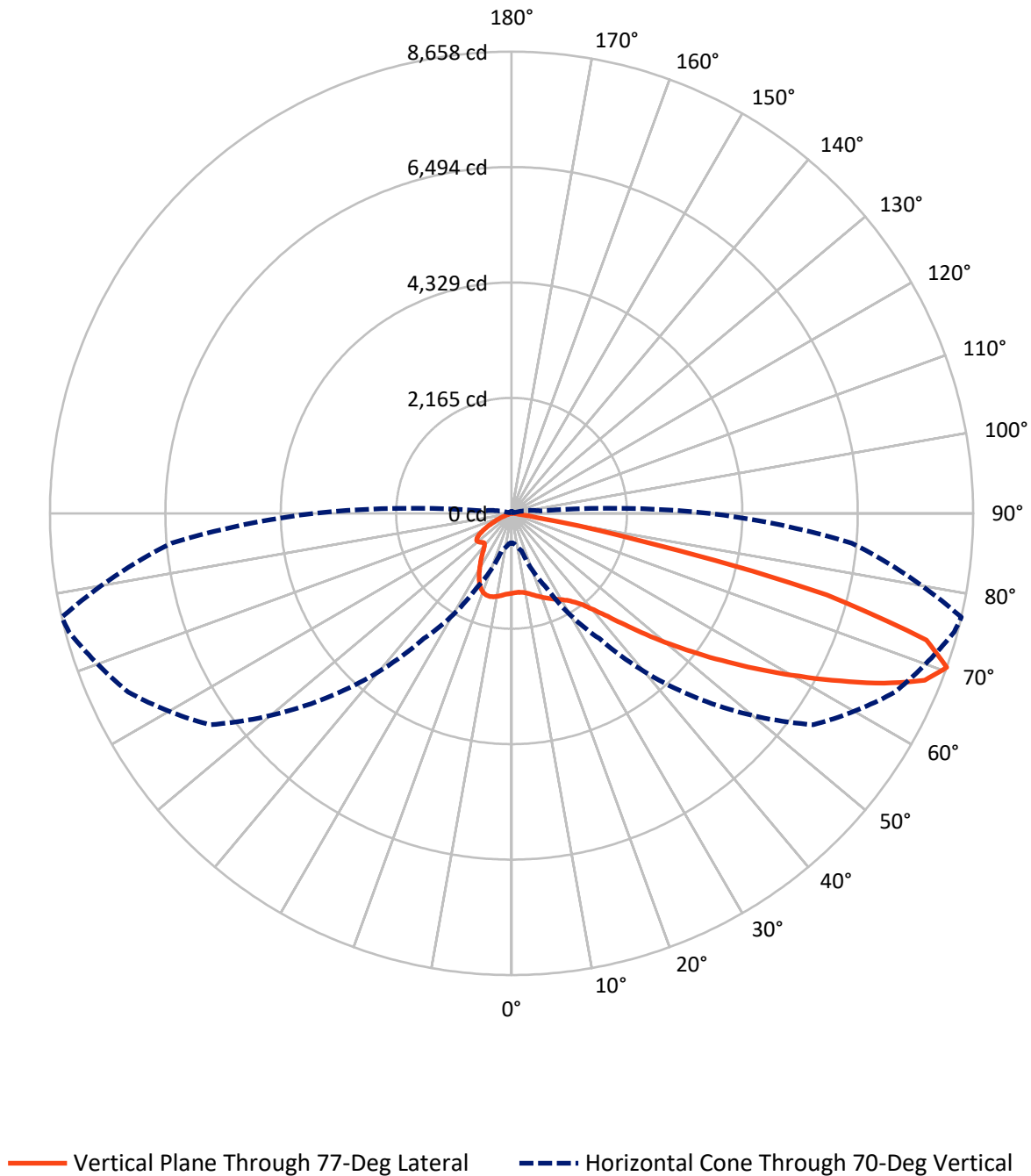
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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	1013.0	0.0	1013.0
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	8596.4	0.0	8596.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	9609.4	0.0	9609.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	1.3
10°-20°	306.7	3.2
20°-30°	474.3	4.9
30°-40°	860.7	9.0
40°-50°	1624.6	16.9
50°-60°	2347.5	24.4
60°-70°	2498.8	26.0
70°-80°	1324.2	13.8
80°-90°	43.5	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°	9609.4	100.0
0°-180°	9609.4	100.0

Coefficient of Utilization



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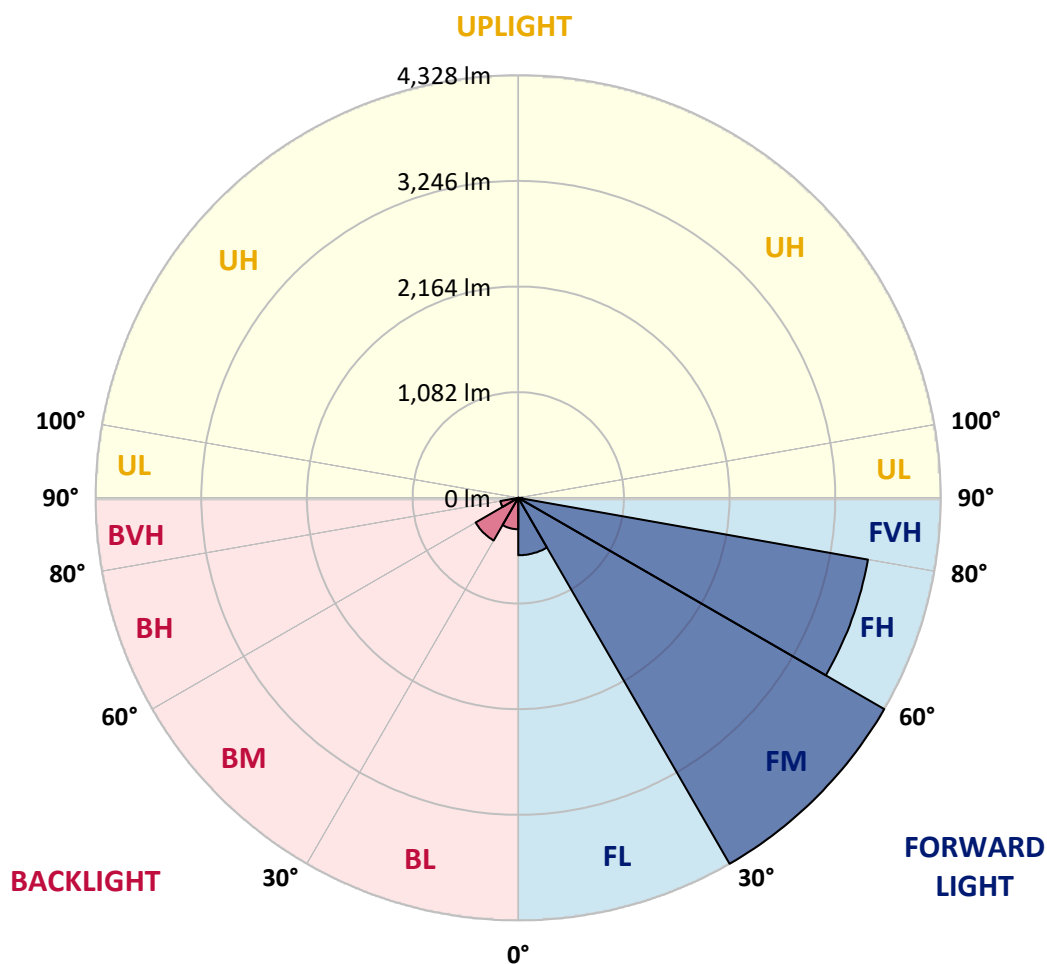
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	588.3	6.1			
FM	(30°-60°)	4328.5	45.0			
FH	(60°-80°)	3637.3	37.9			G2/5000
FVH	(80°-90°)	42.3	0.4			G1/100
BL	(0°-30°)	321.8	3.3	B1/500		
BM	(30°-60°)	504.3	5.2	B1/1000		
BH	(60°-80°)	185.7	1.9	B1/500		G1/500
BVH	(80°-90°)	1.2	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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1407.2	1420.0	1418.2	1426.7	1429.7	1441.9	1454.0	1470.4	1488.6	1488.0	1500.1
5°	1327.8	1340.5	1343.6	1355.0	1369.6	1388.5	1413.4	1446.1	1480.1	1485.5	1509.8
7.5°	1233.7	1247.0	1254.9	1278.0	1304.7	1343.6	1384.2	1432.1	1488.6	1496.5	1543.1
10°	1139.6	1151.8	1162.1	1194.8	1237.4	1295.0	1361.1	1430.3	1506.1	1517.7	1583.8
12.5°	1081.4	1093.0	1104.4	1132.9	1185.7	1256.1	1345.9	1438.8	1535.3	1551.6	1639.1
15°	1060.8	1071.0	1080.1	1105.7	1154.8	1234.9	1343.0	1456.4	1572.4	1594.2	1705.8
17.5°	1063.7	1069.3	1075.3	1094.7	1142.7	1225.2	1348.4	1486.8	1616.0	1635.4	1772.5
20°	1081.4	1084.4	1085.1	1098.4	1140.8	1224.0	1359.4	1515.9	1657.3	1683.4	1838.7
22.5°	1103.8	1105.1	1103.8	1112.9	1152.4	1233.1	1373.9	1551.0	1703.3	1727.6	1905.5
25°	1208.8	1185.7	1156.6	1139.1	1171.8	1250.7	1395.7	1598.4	1753.8	1777.5	1970.4
27.5°	1534.7	1468.5	1364.2	1247.0	1211.9	1276.2	1426.1	1646.4	1804.7	1825.9	2040.2
30°	2063.8	1977.1	1799.9	1535.9	1340.5	1329.6	1465.5	1694.3	1858.7	1881.8	2114.8
32.5°	2594.3	2573.0	2368.5	2003.2	1630.0	1448.5	1531.0	1759.2	1930.4	1948.5	2215.5
35°	3130.7	3087.6	2920.1	2559.0	2076.0	1690.6	1640.3	1844.2	2024.4	2045.1	2362.4
37.5°	3541.5	3515.4	3411.6	3114.3	2605.1	2064.5	1827.2	1975.9	2160.9	2184.0	2550.5
40°	3904.4	3892.2	3857.1	3661.1	3196.8	2553.6	2117.9	2179.8	2350.3	2377.6	2781.1
42.5°	4189.6	4218.1	4238.2	4183.5	3806.6	3111.9	2508.7	2466.1	2614.3	2642.1	3074.9
45°	4481.5	4491.2	4571.9	4650.8	4412.3	3695.6	2949.2	2801.7	2942.6	2977.1	3426.8
47.5°	4669.0	4707.8	4849.9	4988.8	4921.4	4274.6	3422.6	3198.0	3323.0	3387.9	3821.3
50°	4682.9	4756.4	4951.8	5193.9	5292.3	4825.6	3937.1	3649.5	3782.5	3854.0	4242.4
52.5°	4450.5	4564.6	4867.4	5221.9	5492.5	5292.3	4469.4	4101.0	4271.5	4365.0	4679.3
55°	3412.2	3561.6	4550.1	5070.2	5500.4	5646.0	4987.5	4571.3	4816.5	4922.0	5151.4
57.5°	2972.9	3048.1	3577.4	4806.7	5354.1	5788.6	5456.1	5019.1	5409.3	5540.4	5597.4
60°	2473.4	2572.3	3000.2	4375.9	5155.6	5802.6	5870.0	5596.9	6052.0	6199.4	6006.5
62.5°	1680.9	1788.3	2213.7	3635.6	4884.4	5795.9	6209.1	6191.6	6766.2	6924.6	6353.0
65°	1041.3	1108.7	1389.1	2968.6	4505.2	5803.1	6564.2	6913.7	7519.9	7680.7	6621.2
67.5°	822.9	853.8	1000.1	2279.3	3851.6	5639.3	6918.5	7592.8	8229.3	8356.7	6703.1
70°	552.8	571.6	727.6	1528.0	2865.5	4883.2	6911.9	7933.8	8594.6	8658.4	6404.6
72.5°	291.3	305.9	425.4	707.6	1730.7	3471.2	5826.2	7526.0	8231.2	8135.2	5474.3
75°	145.7	169.9	286.4	359.3	739.1	1935.8	3617.9	5933.6	6478.6	6107.3	3512.4
77.5°	110.5	133.5	236.7	236.7	257.3	651.7	1532.3	3236.2	2985.0	2485.6	1031.0
80°	70.4	91.0	206.9	179.1	107.4	165.6	399.3	906.6	634.2	482.5	187.5
82.5°	41.3	59.4	172.3	118.3	60.1	61.3	112.9	193.0	164.4	128.0	57.6
85°	16.4	38.8	118.3	46.7	23.7	15.2	34.0	41.3	34.0	25.5	14.6
87.5°	0.0	9.1	20.6	0.0	1.8	1.2	2.5	3.1	3.1	2.5	4.8
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°	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9	1498.9
2.5°	1505.5	1506.7	1510.4	1511.1	1502.5	1491.6	1487.4	1485.5	1478.3	1477.6	1478.9
5°	1523.8	1529.2	1523.8	1508.0	1470.4	1417.6	1377.5	1344.8	1315.0	1306.0	1300.4
7.5°	1560.2	1565.7	1549.3	1487.4	1392.7	1287.7	1193.0	1126.3	1066.2	1043.8	1034.6
10°	1612.3	1619.6	1568.0	1443.1	1275.6	1106.9	946.7	833.8	745.8	710.0	694.8
12.5°	1677.9	1680.9	1578.4	1375.7	1123.3	882.3	655.4	534.6	456.3	427.2	418.1
15°	1750.1	1745.9	1579.6	1284.0	915.7	623.8	427.8	351.4	319.8	310.1	310.1
17.5°	1825.9	1808.4	1555.3	1151.8	688.2	426.6	317.3	299.2	293.7	291.3	290.7
20°	1900.7	1861.2	1511.1	978.9	493.9	318.6	288.2	282.8	279.7	278.5	277.4
22.5°	1968.6	1901.3	1435.2	778.0	358.6	281.6	272.4	267.6	262.2	259.7	259.1
25°	2034.7	1924.2	1328.4	590.5	287.0	263.3	256.0	247.0	239.7	236.7	235.4
27.5°	2099.1	1938.9	1194.8	437.0	256.0	246.4	233.0	220.3	214.8	213.6	212.4
30°	2167.7	1943.7	1043.1	325.8	237.3	225.1	205.7	191.2	188.1	188.7	188.7
32.5°	2251.4	1951.0	890.2	267.0	221.5	199.7	176.6	161.4	159.0	161.4	160.8
35°	2351.5	1965.5	742.8	245.8	207.6	173.5	148.6	135.9	133.5	135.3	134.7
37.5°	2487.5	1989.2	605.1	241.5	196.0	151.7	125.0	114.7	114.7	115.3	114.7
40°	2668.3	2052.4	481.9	238.5	189.9	135.3	105.6	101.4	103.1	104.3	104.3
42.5°	2888.6	2186.4	398.7	234.8	183.3	128.0	95.8	94.1	97.1	98.3	98.3
45°	3135.6	2356.4	369.6	228.8	177.2	132.9	91.6	89.2	92.9	93.5	94.1
47.5°	3391.0	2522.6	365.9	222.1	171.2	140.2	90.4	85.0	89.2	89.8	90.4
50°	3649.5	2631.3	369.6	211.8	161.4	140.2	91.0	80.7	84.4	86.2	86.8
52.5°	3909.9	2681.0	367.2	189.3	144.4	131.7	91.0	77.1	80.7	81.9	81.9
55°	4162.3	2671.3	330.2	156.0	122.6	116.5	88.6	74.0	76.5	77.1	77.1
57.5°	4362.0	2536.0	261.6	121.4	99.5	97.1	80.7	70.4	72.3	71.6	71.6
60°	4466.3	2238.6	186.9	93.5	78.3	76.5	71.0	65.5	66.7	63.8	63.1
62.5°	4467.6	1845.4	125.0	74.0	62.5	60.7	60.7	58.8	57.6	51.6	49.7
65°	4372.2	1409.1	83.1	58.8	50.3	47.4	50.9	50.3	46.1	37.6	36.4
67.5°	4156.3	923.6	63.1	46.1	38.8	37.0	40.7	42.4	39.5	31.6	31.0
70°	3712.0	537.6	52.2	35.8	29.1	27.3	32.8	36.4	32.8	25.5	24.3
72.5°	3083.3	290.1	42.4	26.6	20.0	18.2	26.1	29.7	26.1	18.9	18.2
75°	2000.7	155.4	32.8	17.6	10.4	11.5	19.4	21.8	18.2	12.1	11.0
77.5°	671.8	68.6	20.6	8.5	4.8	4.8	11.5	13.3	8.5	4.2	3.7
80°	149.9	28.5	8.5	3.7	1.8	1.8	2.5	2.5	1.2	0.0	0.0
82.5°	49.2	11.5	3.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	18.9	4.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.3	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)