

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: INVUE

Report Number: P401668

Luminaire Tested: **ENT-SA1E-740-U-SL2**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401668  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1E-740-U-SL2  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6948 lumens  
Efficiency: N/A  
Efficacy: 121.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 57.2  
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: 25 FT

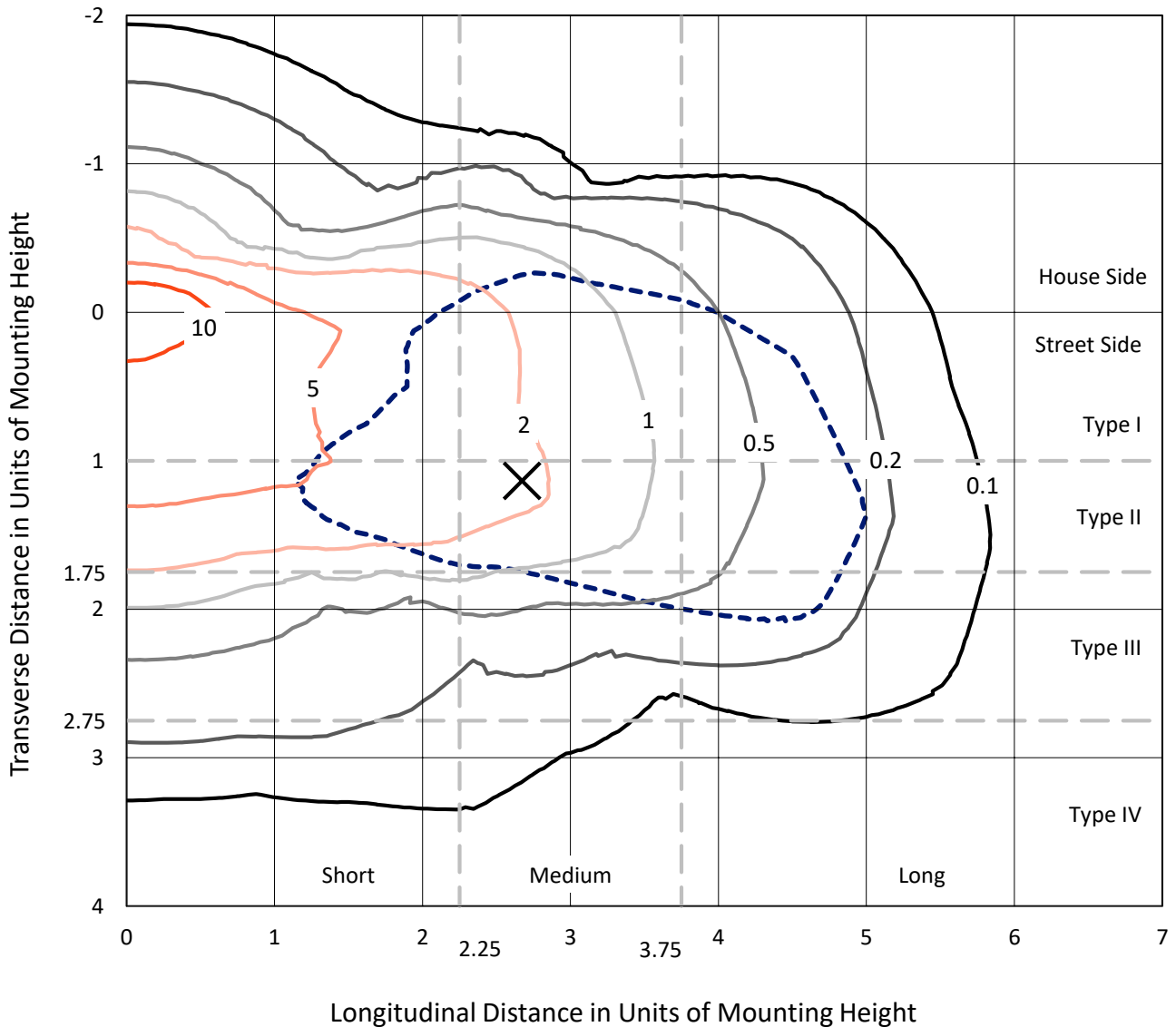


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### Iso-Footcandle Lines of Horizontal Illumination

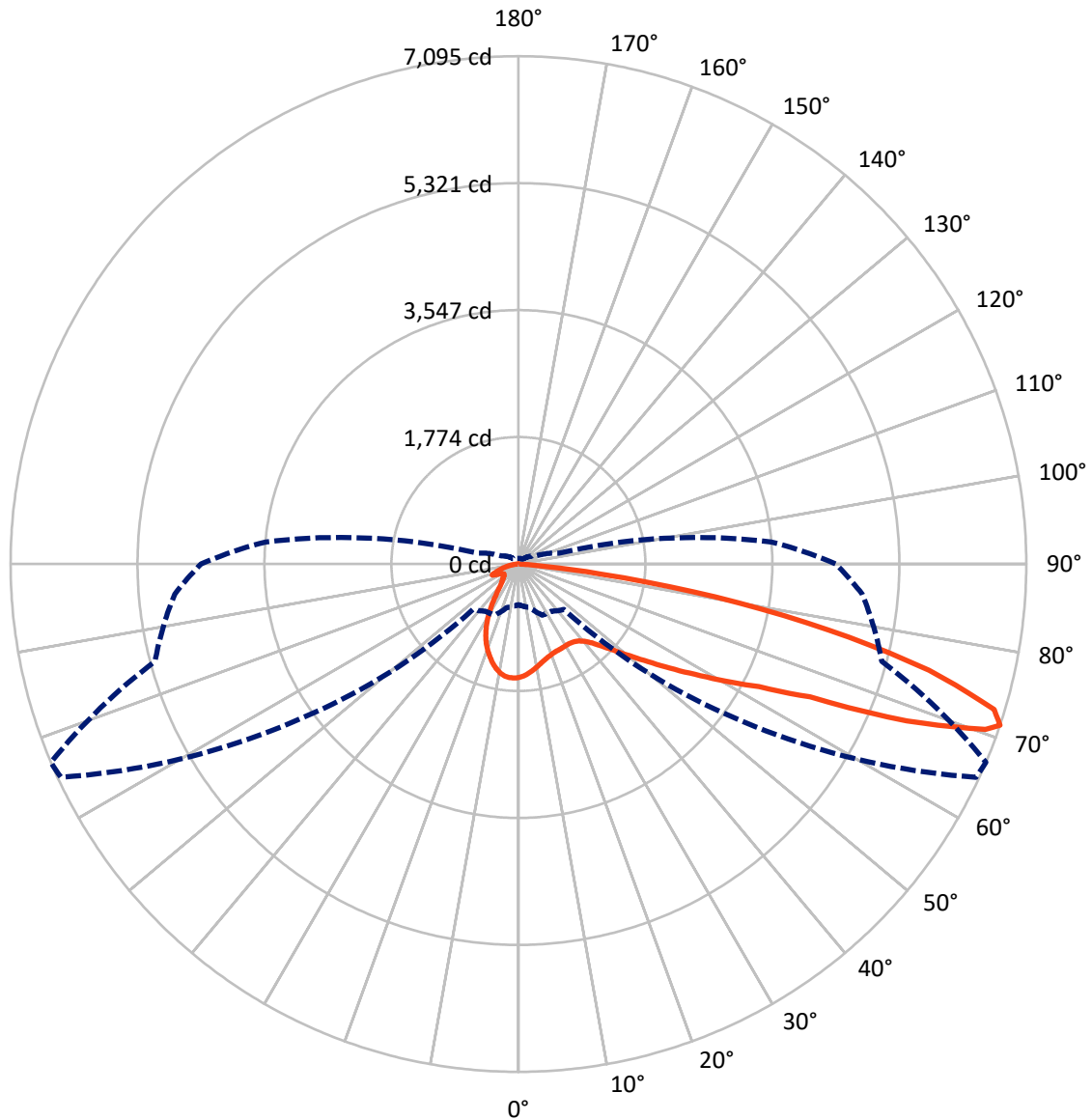
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.8 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1423.4	0.0	1423.4
	% Fixture	20.5	0.0	20.5
<b>Street Side</b>	Lumens	5524.6	0.0	5524.6
	% Fixture	79.5	0.0	79.5
<b>Total</b>	Lumens	6948.0	0.0	6948.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.4	2.0
10°-20°	345.0	5.0
20°-30°	465.8	6.7
30°-40°	613.5	8.8
40°-50°	873.8	12.6
50°-60°	1334.9	19.2
60°-70°	1666.8	24.0
70°-80°	1345.5	19.4
80°-90°	162.2	2.3
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°	6948.0	100.0
0°-180°	6948.0	100.0



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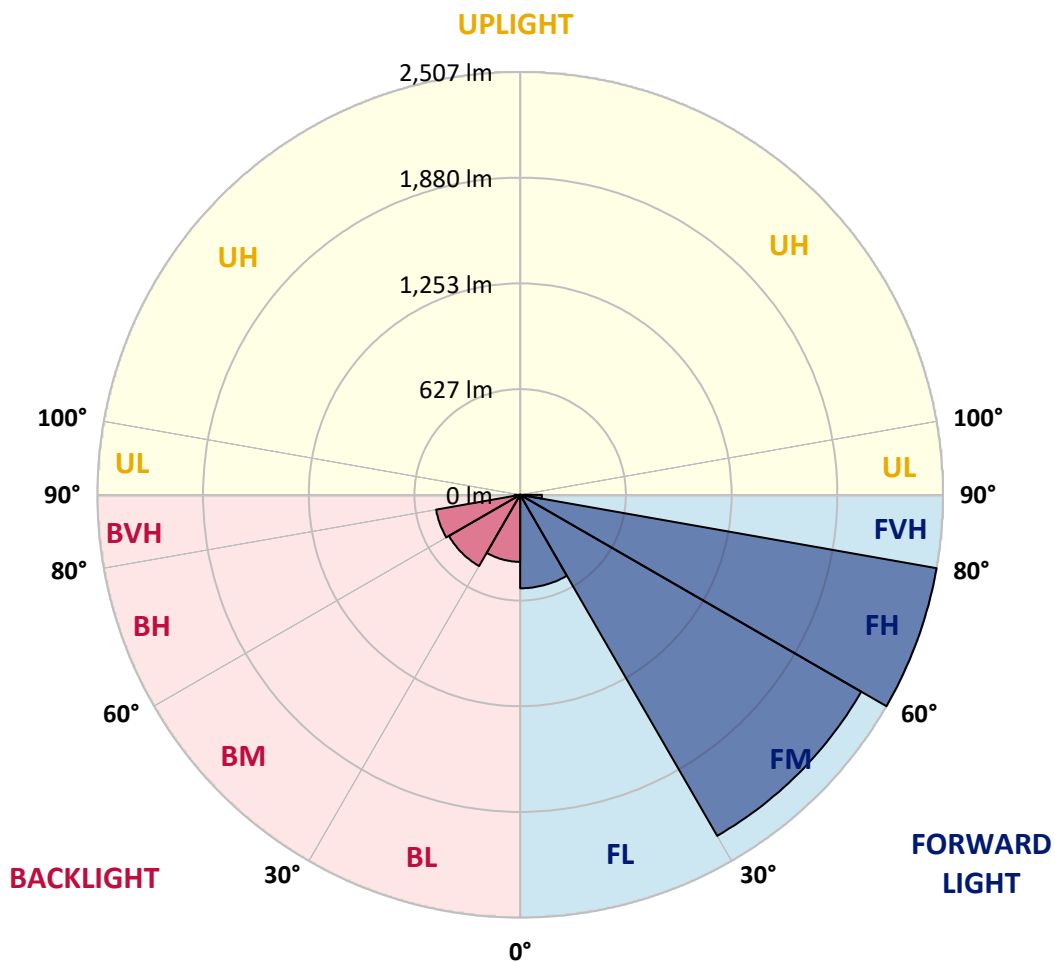
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	554.1	8.0			
FM	(30°-60°)	2334.6	33.6			
FH	(60°-80°)	2506.5	36.1			G2/5000
FVH	(80°-90°)	129.3	1.9			G2/225
BL	(0°-30°)	397.1	5.7	B1/500		
BM	(30°-60°)	487.6	7.0	B1/1000		
BH	(60°-80°)	505.8	7.3	B2/1000		G2/1000
BVH	(80°-90°)	32.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3
2.5°	1494.3	1501.3	1502.3	1516.3	1521.3	1537.3	1546.3	1561.3	1563.3	1572.3	1578.3
5°	1397.3	1398.3	1404.3	1416.3	1435.3	1464.3	1486.3	1523.3	1530.3	1556.3	1579.3
7.5°	1310.3	1315.3	1325.3	1343.3	1365.3	1399.3	1433.3	1484.3	1494.3	1536.3	1580.3
10°	1251.3	1256.3	1264.3	1284.3	1306.3	1344.3	1385.3	1444.3	1455.3	1513.3	1577.3
12.5°	1204.2	1209.3	1215.3	1237.3	1261.3	1299.3	1341.3	1407.3	1418.3	1485.3	1570.3
15°	1173.2	1174.2	1182.2	1200.2	1227.3	1264.3	1306.3	1374.3	1387.3	1463.3	1568.3
17.5°	1154.2	1156.2	1163.2	1177.2	1201.2	1237.3	1278.3	1347.3	1362.3	1445.3	1569.3
20°	1155.2	1157.2	1161.2	1166.2	1183.2	1214.3	1257.3	1327.3	1342.3	1434.3	1576.3
22.5°	1176.2	1177.2	1178.2	1171.2	1177.2	1199.2	1241.3	1313.3	1329.3	1429.3	1584.3
25°	1216.3	1216.3	1214.3	1198.2	1185.2	1194.2	1232.3	1308.3	1324.3	1425.3	1592.3
27.5°	1271.3	1275.3	1265.3	1246.3	1216.3	1201.2	1230.3	1304.3	1320.3	1425.3	1596.3
30°	1346.3	1348.3	1344.3	1319.3	1270.3	1229.3	1236.3	1301.3	1317.3	1423.3	1597.3
32.5°	1422.3	1428.3	1433.3	1411.3	1352.3	1279.3	1260.3	1305.3	1319.3	1422.3	1594.3
35°	1499.3	1503.3	1527.3	1523.3	1459.3	1354.3	1299.3	1321.3	1333.3	1427.3	1596.3
37.5°	1565.3	1574.3	1609.3	1636.3	1586.3	1456.3	1366.3	1356.3	1363.3	1452.3	1607.3
40°	1636.3	1649.3	1701.4	1752.4	1730.4	1584.3	1461.3	1419.3	1417.3	1498.3	1634.3
42.5°	1716.4	1731.4	1798.4	1872.4	1879.4	1747.4	1588.3	1508.3	1506.3	1577.3	1693.4
45°	1810.4	1824.4	1915.4	2003.4	2046.4	1929.4	1744.4	1634.3	1635.3	1687.3	1787.4
47.5°	1926.4	1948.4	2036.4	2148.4	2225.5	2134.4	1933.4	1810.4	1802.4	1853.4	1941.4
50°	2089.4	2107.4	2180.5	2289.5	2424.5	2382.5	2171.4	2022.4	2016.4	2040.4	2147.4
52.5°	2260.5	2266.5	2301.5	2414.5	2641.5	2683.6	2464.5	2285.5	2262.5	2275.5	2403.5
55°	2270.5	2283.5	2306.5	2449.5	2836.6	3044.6	2787.6	2595.5	2565.5	2556.5	2694.6
57.5°	2062.4	2083.4	2113.4	2298.5	2844.6	3461.7	3246.7	2957.6	2903.6	2858.6	3005.6
60°	1621.3	1648.3	1703.4	1930.4	2641.5	3699.8	4012.8	3363.7	3315.7	3162.7	3309.7
62.5°	1172.2	1183.2	1236.3	1338.3	2096.4	3713.8	4811.0	3893.8	3774.8	3458.7	3571.7
65°	944.2	962.2	978.2	977.2	1241.3	3293.7	5341.1	4837.0	4477.9	3789.8	3859.8
67.5°	778.2	784.2	823.2	891.2	844.2	2034.4	5394.1	6215.3	5851.2	4235.9	4201.9
70°	650.1	652.1	691.1	813.2	808.2	1050.2	4522.9	7008.5	6920.4	4968.0	4737.0
71°	569.1	586.1	629.1	787.2	804.2	897.2	3842.8	7050.5	7094.5	5255.1	4820.0
72.5°	448.1	448.1	509.1	722.1	811.2	828.2	2831.6	6821.4	6948.4	5581.2	4676.0
75°	263.1	261.1	294.1	503.1	829.2	825.2	1546.3	5669.2	5926.2	5640.2	4327.9
77.5°	148.0	151.0	169.0	280.1	658.1	792.2	888.2	4127.9	4430.9	4718.0	3659.8
80°	68.0	72.0	85.0	136.0	388.1	684.1	634.1	2680.6	2795.6	2835.6	1729.4
82.5°	18.0	20.0	26.0	52.0	150.0	466.1	469.1	1122.2	1159.2	670.1	371.1
85°	0.0	0.0	0.0	0.0	2.0	57.0	133.0	202.0	168.0	89.0	76.0
87.5°	0.0	0.0	0.0	0.0	0.0	2.0	3.0	4.0	4.0	4.0	5.0
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°	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3	1584.3
2.5°	1583.3	1587.3	1594.3	1593.3	1591.3	1579.3	1586.3	1579.3	1578.3	1575.3	1576.3
5°	1587.3	1593.3	1597.3	1588.3	1573.3	1547.3	1538.3	1515.3	1500.3	1492.3	1488.3
7.5°	1593.3	1597.3	1595.3	1570.3	1531.3	1482.3	1440.3	1407.3	1372.3	1366.3	1364.3
10°	1593.3	1597.3	1581.3	1533.3	1466.3	1389.3	1325.3	1271.3	1217.3	1197.2	1200.2
12.5°	1589.3	1591.3	1554.3	1477.3	1380.3	1275.3	1185.2	1096.2	1027.2	985.2	977.2
15°	1586.3	1583.3	1518.3	1407.3	1278.3	1148.2	1012.2	892.2	810.2	755.2	748.2
17.5°	1586.3	1575.3	1475.3	1327.3	1167.2	988.2	808.2	678.1	587.1	555.1	554.1
20°	1588.3	1564.3	1429.3	1244.3	1029.2	798.2	603.1	492.1	458.1	453.1	454.1
22.5°	1590.3	1549.3	1379.3	1150.2	875.2	595.1	431.1	391.1	394.1	406.1	405.1
25°	1588.3	1529.3	1320.3	1045.2	707.1	429.1	348.1	338.1	356.1	370.1	374.1
27.5°	1583.3	1503.3	1257.3	920.2	539.1	338.1	304.1	303.1	321.1	334.1	333.1
30°	1568.3	1472.3	1184.2	788.2	389.1	288.1	274.1	277.1	289.1	301.1	301.1
32.5°	1552.3	1437.3	1107.2	644.1	299.1	261.1	256.1	257.1	265.1	274.1	273.1
35°	1535.3	1403.3	1028.2	494.1	262.1	245.1	243.1	242.1	245.1	247.1	247.1
37.5°	1525.3	1373.3	941.2	372.1	242.1	235.0	231.0	227.0	226.0	224.0	222.0
40°	1529.3	1353.3	857.2	288.1	230.0	224.0	218.0	212.0	208.0	206.0	205.0
42.5°	1557.3	1347.3	764.2	248.1	219.0	214.0	206.0	196.0	192.0	192.0	191.0
45°	1622.3	1365.3	677.1	228.0	209.0	203.0	190.0	183.0	180.0	181.0	181.0
47.5°	1724.4	1416.3	599.1	218.0	202.0	193.0	178.0	171.0	169.0	170.0	170.0
50°	1877.4	1512.3	519.1	209.0	194.0	182.0	169.0	161.0	158.0	158.0	158.0
52.5°	2101.4	1670.3	461.1	203.0	187.0	173.0	160.0	151.0	147.0	147.0	146.0
55°	2374.5	1876.4	439.1	199.0	178.0	165.0	151.0	142.0	136.0	134.0	135.0
57.5°	2673.6	2143.4	471.1	198.0	168.0	156.0	142.0	131.0	125.0	124.0	123.0
60°	2981.6	2408.5	563.1	193.0	160.0	145.0	132.0	122.0	116.0	114.0	113.0
62.5°	3247.7	2672.6	715.1	189.0	154.0	135.0	121.0	112.0	107.0	104.0	104.0
65°	3568.7	2975.6	947.2	194.0	151.0	125.0	111.0	103.0	99.0	96.0	96.0
67.5°	4006.8	3424.7	1123.2	218.0	158.0	117.0	100.0	94.0	91.0	89.0	89.0
70°	4437.9	3676.8	781.2	256.1	176.0	110.0	90.0	86.0	84.0	82.0	82.0
71°	4431.9	3541.7	587.1	265.1	182.0	108.0	86.0	83.0	81.0	80.0	79.0
72.5°	4209.9	3219.7	421.1	257.1	179.0	102.0	81.0	78.0	76.0	76.0	75.0
75°	3775.8	2837.6	329.1	215.0	150.0	91.0	72.0	70.0	68.0	67.0	68.0
77.5°	3093.6	2270.5	259.1	170.0	114.0	75.0	64.0	61.0	60.0	59.0	60.0
80°	1421.3	989.2	189.0	132.0	85.0	60.0	54.0	53.0	52.0	51.0	51.0
82.5°	342.1	277.1	101.0	88.0	58.0	46.0	43.0	43.0	43.0	42.0	42.0
85°	75.0	75.0	41.0	41.0	35.0	32.0	34.0	34.0	34.0	32.0	32.0
87.5°	4.0	12.0	13.0	19.0	20.0	19.0	23.0	24.0	23.0	22.0	21.0
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)